

BUSINESS WEEK

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FARMERS' INCOME BREAKS ALL RECORDS



START
OF WAR
1939

BUSINESS
WEEK
INDEX

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WASHINGTON BULLETIN

Reconversion Compromise

The week's compromise doesn't end the grim fight over reconversion plans within the War Production Board. For that reason, it means less to business (page 9) than the Washington headlines indicate.

When the long-standing internal row finally blew the lid off this week, War Mobilization Director James F. Byrnes, chief fixer for the White House, lost no time clamping the lid back on. But that just conceals the in-fighting from the public.

Issue Clear

The issue was whether WPB should draft orders carrying out Chairman Donald M. Nelson's desire to start "piece-meal reconversion" now. These orders, opposed by most of Nelson's vice-chairmen would (1) permit a manufacturer to make a single experimental model of any postwar product, (2) ease aluminum and magnesium into civilian use, (3) allow companies to contract now for machine tools that they will need in civilian production, (4) empower WPB regional directors to take manufacturers out from under limitation and conservation orders—and thus put them back into civilian business—on an individual basis.

These four proposals had been criticized by the Joint Chiefs of Staff as likely to distract from war production. Washington debaters had shaken warning fingers—or shrugged nonchalant shoulders—over the contention that the fourth would let newcomers into old lines while established competitors in those lines were still tied up on war work, would damage the competitive status of big companies scheduled to remain deep in war production while smaller ones were let out, would spoil hopes of carrying through reconversion on an orderly industry-by-industry basis.

Outcome Not So Clear

The compromise came after the WPB vice-chairmen had decided to delay Nelson's orders, the Joint Chiefs had publicly urged that course, Sen. Truman had publicly opposed it, and the whole matter had been carried to Byrnes. It gives full effect to Nelson's policies but delays their application—to July 15 on the aluminum-magnesium order, to July 22 on postwar experimental models, to July 29 on machine tool orders, to Aug. 15 on the authorization of WPB re-

gional offices to lift restrictions on individual plants. Since the last is the keystone of Nelson's plan, the other three orders have only limited effect until it comes out.

Even with the delay, this compromise represents a victory for Nelson as far as policy is concerned. But policy is one thing and, in WPB, practice can be something entirely different. Administration of the policies will be in the hands of the vice-chairmen who opposed them. So the compromise, which gives the White House an opportunity to take credit both for protecting war production and for planning reconversion, may reduce the achievement to simply getting the reconversion fight back under cover.

WPB Lineup

The lines in WPB haven't been too clearly drawn. Nelson emerges in the role of champion of the civilian (backed by his labor and small-business vice-chairmen, and sometimes by his civilian requirements vice-chairman). Executive Vice-Chairman Charles E. Wilson, charged with war production, teamed with the remaining vice-chairmen to support the armed services' point of view in the dispute. Yet, with Nelson recuperating from pneumonia and shielded even from the telephone by doctors' orders, Wilson carried the ball for him in the last stages which led to the compromise.

There were rumblings among the opposing vice-chairmen that Wilson had doublecrossed them. His actions clearly reflected a feeling that efficiency in WPB's organization demanded that he push through the program that his boss had set up.

More Coal—But More Needed

Deputy Solid Fuels Administrator C. J. Potter let a cat out of the bag when he told the Truman committee that bituminous coal production now is expected to reach 616,000,000 tons in 1944. Previously his office had predicted that 596,000,000 tons would be the limit. Official revision of this estimate will not be forthcoming for a couple of weeks.

The production boost will be partly offset by an increase in estimated needs—from 616,000,000 to 626,000,000 tons—as a result of increased transportation and a higher level of industrial activity. Even so, the change in the figures

halves the estimated deficit for the year, which now becomes 10,000,000 tons instead of 20,000,000.

Coal men aren't surprised to hear what the revision will be. They have noted that Solid Fuels Administrator Harold L. Ickes tends to make the blackest possible estimate at the start of the year, then sweeten it as time goes on. In this way, he gets credit either for improving the situation or for being a good prophet.

Advisers Get a Voice

OPA is taking seriously Congress' order to pay more attention to industry advisory committees. Price Administrator Chester Bowles is doing more than going through the motions of compliance in setting up a new Office of Industry Advisory Committees, headed by Mrs. Ethel V. Gilbert.

A memorandum from Bowles to all OPA executives will give the office a real grant of authority. Officials will be told that they cannot issue any regulation unless the appropriate advisory committee has been fully consulted.

Not all the traffic will be one-way, however. Bowles wants the advisory committees to do some serious homework in studying OPA's basic pricing policies and problems.

Textile Outlook Brighter

The serious civilian textile shortage will continue, but there are at least two bright spots in third-quarter allocations:

(1) All claimant agencies have received firm allocations which means that the Army and Navy will not be able to increase their takings, as they did in the first part of the year, without making a full justification to WPB's Requirements Committee.

(2) While the over-all civilian allotment isn't much bigger, civilians will get more of the most critically needed goods.

M-317-A, the draft of a new textile conservation order, is now circulating in WPB. This will assure that certain basic constructions—denims, chambrays, sheetings, print cloth, etc.—will be reserved for specific essential end uses, principally low-priced clothing (BW—May 13 '44, p. 45).

The Office of Civilian Requirements' consumer survey of textile shortages was outdated by the time it was issued last week. Supplies of some items have in-



PHOTO—AMERICAN MAGAZINE

The author*—a gunner who flew on more than 69 missions. He was awarded the Distinguished Flying Cross, the Air Medal, the Purple Heart and a Presidential Citation and has recently received a medical discharge.

WE WERE Grounded on Guadalcanal

Henderson Field, Guadalcanal.

October 17. "We came out looking for food. After spending the last 48 hours straight in our foxholes—waist-deep in mud and water, while the Japs shelled us from their cruisers and shore batteries—we were hungry. But we had no luck at any of the field kitchens. When we asked where the hell our chow was, the mess officer told us the cooks were down on the beaches doing something a lot more important than filling our bellies. They were manhandling 50-gallon gasoline drums. Apparently the cargo ships had had to throw the stuff over-

board and let the tide carry the drums in toward shore. So we went on down to help out. We spent 72 hours without a break, manhandling those 50-gallon drums of gasoline around in deep water. The belly of a plane has a hell of a lot more priority on being fed than the belly of a soldier..."

Henderson Field.

October 28. "Operations canceled all bombing missions today for a new reason—which makes things look pretty black around here. For a long time now, we've been short on gasoline. The bomb-bay

tanks of all Fortresses were drained today to feed the fighters. Apparently some tankers have been sunk on their way out here, and there is barely enough gasoline to keep our tiny force of fighters in the air—let alone to send a Fortress out bombing, which needs about 2000 gallons. If gasoline does not come in a week, we might as well surrender or retreat..."

Henderson Field.

November 1. "Terrific celebrations in camp today (on home brew from the coconuts!). The tankers arrived! These tankers had been on their way to some other destination, but frantic radio messages diverted them to us. Thank God we've got gasoline at last! Our chances of ever getting out of this hell hole look better now. And tomorrow we go bombing again—up to hit at Bougainville..."

New Hebrides.

November 20. "What a day! Bombed Munda Point, New Georgia. Our bombardier did a wonderful job and laid eight 500-pounders right in their lap. We believe he blew up a gasoline dump, judging by the flames and explosions. Put Tojo right in that spot we were in back in October. Boy, if he is out of gas we'll be able to paste the living daylight out of him!"

New Hebrides.

November 26. "Landed from a tough 10-hour mission, and looked forward to chow and sleep. But Operations had different ideas. A new Jap task force had just been sighted and we were ordered out to bomb it immediately. We loaded a new set of bombs and a fresh supply of ammunition and started to take on the 1000 gallons of gasoline we needed. Then the pumping system went phut. So we had to load by hand. But help came in the shape of a three-star general and his staff, of all things! When he heard we had to load by hand after 10 hours' straight flying and had to go out again immediately, he ordered us all to take a snooze under the wing while the old man himself and his pompous staff took off their shirts and loaded 400 gallons themselves by hand! First time I have ever seen a three-star general load gasoline while a private slept under the wing! Did my soul good. But just shows what a hell of a swell outfit this Air Force is when we go into combat."

★ ★ ★

Now you know what gasoline—or the lack of it—can mean at the fighting front. Please remember, gasoline powers the attack—don't waste a drop. Buy as little—use as little—as you can. Ethyl Corporation, Chrysler Building, New York, N. Y.

*Name on request from the Ethyl Corporation

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increased, many others probably have decreased, since the survey was conducted nearly last spring.

Buffalo Meat Probe Likely

Trouble between OPA and independent meat packers in Buffalo, N. Y., has flared up again.

The price agency is ready to launch an investigation, with particular emphasis on the marketing practices of meat packers and retailers in Buffalo. The probe will bypass OPA's Buffalo office, which has tended to sympathize with the packers' contention that they cannot operate under present price ceilings.

Buffalo's meat troubles appeared to have cleared up six weeks ago, when packers reopened their plants which had been closed in protest against OPA (BW—May 27'44, p7). OPA became suspicious, however, when the packers

failed to apply for federal subsidies.

The agency believes its suspicions are confirmed by reports of widespread black market dealings received from Buffalo consumers and retailers.

OCR Seeks Lumber Grip

WPB's Office of Civilian Requirements hopes that before long the new lumber control system (BW—Jun. 24'44, p17) will be modified to give it more authority over allocations to nonmilitary uses.

Under the present setup, OCR handles only civilian maintenance and repair allotments, nonmilitary government requirements, and a few other small categories. All other users get their allotments through WPB industry divisions, even though the wood is used in programs that OCR has set up.

Since the order went into effect, OCR has been called in several times

to straighten out tangles that resulted when a program crossed industry lines. It is plugging for a system comparable to the present controlled materials setup under which it gets an over-all allocation of materials covering all its programs, makes adjustments among various programs, and then assigns allotments to the industry divisions which pass them along to the manufacturers.

Furniture Makers Appraised

Furniture manufacturers, who have had their differences with the Office of Civilian Requirements (page 20), now are ready to let bygones be bygones. OCR has just staved off a drastic direction, accompanying the new lumber control order, which would have restricted the industry's use of eleven hardwoods comprising about 87% of all hardwood production.

Under the first draft of the order, furniture makers would have been al-

One Democratic Candidate—Two Parties

The Democratic Party is coming up against the 1944 campaign decisively united on only one thing—and that is its intention to renominate President Roosevelt as the only conceivable means of winning the election.

This is not a particularly solid foundation on which to try to erect a fourth-term house, and the fissures which are developing, even ahead of the Chicago convention, are giving the Administration's political architects real concern.

• **Hannegan's Headache**—Here are some of the more evident difficulties which face Robert E. Hannegan, chairman of the Democratic National Committee, as he takes over where Harry Hopkins and Edward J. Flynn left off and prepares to keep the "Commander-in-Chief" at the helm for four more years:

(1) The anti-New Deal revolt in several southern states is more than annoying. Its damage may well be greater outside the solid South than inside. It impairs the dignity of the President's wartime campaign role and it signalizes to the rest of the country the great uncertainty of whether he could control his own party in Congress even if he were himself reelected and should retain a numerical majority in both houses.

(2) More obviously today than at any time in recent years, there are two Democratic parties wryly trying to look happy under one label. There is the New Deal Party and the Southern Democratic Party. It is a political house-divided-against-itself superficially bound together by the single self-interest of wanting to stay in office. Some southern Democrats are more deeply opposed to the essential policies of the New Deal than are the northern Republicans, and Roosevelt may have a hard time persuading the country which Democratic party he wants it to elect—the southern wing which, for example, passed the Connally-Smith labor disputes law, or the C.I.O. wing which wants the Connally-Smith act repealed.

(3) The Democrats have been maneuvered into the almost inescapable dilemma of either losing the northern Negro support or of fanning the flames of the southern Democratic revolt. The party's southern wing led a recent congressional crusade to snuff out the President's Fair Employment Practices Committee—an agency which the C.I.O.-New Deal wing strongly advocates. By urging a permanent FEPC, the Republican platform dares the New Deal to offer as much to the Negro voter as the G.O.P. does.

(4) Roosevelt has no happy choice for his running mate. He must either offend his own party organization by retaining Wallace or offend his most zealous labor supporters by rejecting Wallace. The President's choice of his vice-presidential candidate will be an indication as to which group he expects to be most decisive in helping bring about his election—the articulate labor groups or the independent, internationalist Republicans who are uncertain where Dewey really stands.

(5) Finally, a complex problem of how to combine statesmanship with politics gives the President a hard choice. Politics tells him to make foreign policy, and his leadership in building the peace, a decisive issue in the campaign as the best means of getting elected. But statesmanship tells him that taking foreign policy, and his leadership in building the peace, out of the heat and scuffle of a partisan campaign is the only means of winning the peace.

• **Problems Remain**—These are some of Roosevelt's more pressing political problems as he awaits the convention. The President's statement this week that he will accept the fourth-term nomination sets the stage for Chicago, but does nothing to solve the party's problems.



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lowed to use nothing better than No. 1 common, and they would have been limited on that to 20% of total usage of the restricted species. The final version of the order, as edited by OCR, applies restrictions to only one hardwood, white oak.

Bond Goal in Sight

Treasury officials still think that individual subscriptions to the Fifth War Loan will claw their way up to the \$6,000,000,000 goal, but they admit it will be a close thing. Latest figures show that through July 11, sales to individuals came to \$4,752,000,000.

War Savings Bond sales for the rest of the month will apply to the quota and late reports from salesmen will trickle in for the next week or so.

The drive wound up officially last week with a total of \$18,811,000,000 recorded in all classes of securities (overall goal was \$16,000,000,000). Officials predict that by the time the final score is in, the total will top \$20,000,000,000.

Capital Gains (and Losses)

Another sale of power by a government project to a privately owned utility is all set. It involves output of Norfolk Dam's 35,000-kw. hydrogenerator to Arkansas Power & Light. Terms will be similar to those given Texas Power & Light by the Southwestern Power Administration (BW—Jun. 3 '44, p. 31).

Glycerin is so plentiful that soap manufacturers have been told by the War Food Administration that they need no longer recover it in their processes, and allocation of supplies has been ended. Tobacco manufacturers have had all they needed for several months.

The Army finally has brought out its long-awaited manual for war contractors on contract termination problems (BW—Jan. 29 '44, p. 22). Copies may be obtained from regional procurement officers of the Army.

Reports that the Foreign Economic Administration is about to ban importation of Swiss watches (BW—Aug. 14 '43, p. 49) are now denied by the agency.

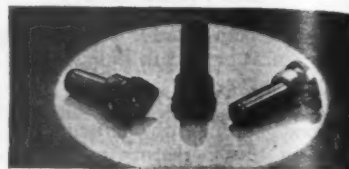
—Business Week's
Washington Bureau

THE COVER

Like a bolt of lightning in reverse, the graph of farmers' cash income (including government payments) zooms toward a \$22,000,000,000 stratosphere for an all-time record (page 17). Powering the almost vertical climb are wartime prices for virtually every agricultural commodity.

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THE OUTLOOK

BUSINESS WEEK
JULY 15, 1944



Reconversion emerged from the chrysalis this week, not as a fullblown butterfly but as a bumbling gray moth.

The Army and Navy, after balking the feeblest beginnings of civilian goods resumption for a full six months, have finally given a little ground.

This doesn't mean much to business in terms of what will come off the production line. But it does mean an end to utter frustration.

Army and Navy, while losing a battle, are winning a war. Even though the services were compelled to let Donald Nelson's preliminary reconversion plan go into effect (page 5), they have hammered home the hard fact that **we are now in one of the most critical stages of war production.**

The services still hold three of the aces:

(1) Invasion, as expected, brought deep-seated shifts in the production program. Emphasis, notably, is on big guns and shells and on tanks.

(2) The campaign against the Japs is six months ahead of schedule. The landing craft, big oil tankers, naval vessels, aircraft, and combat vehicles scheduled for delivery in December are needed now.

(3) Some materials (conspicuously steel), **several components** (forgings, castings, motors), **and a few end products** (trucks over 2½ tons) **can be brought up to military needs only by superhuman effort.**

Don Nelson stayed in the pot with the single ace of dangerously dwindling civilian supply and a lot of face cards, both political and economic.

He put through his four-point plan (BW—Jun. 24'44, p5). **But it won't be fully effective until six weeks after the July 1 deadline he set. Moreover, the men who have to administer it are the ones who opposed him in WPB.**

Easiest course on reconversion would have been to let planning drift until the end of the war in Europe. The speedy tempo of the Pacific war forbade any such lackadaisical approach.

Two of Nelson's orders—No. 1 lifting restrictions on use of aluminum and magnesium July 15, and No. 4 allowing WPB field officials to designate after Aug. 15 companies that are free to start civilian output—**establish the principle that newcomers can't be barred, that industries won't get off to an even start.**

The other two—No. 2 permitting manufacture of experimental models after July 22, and No. 3 permitting orders for machine tools on a when-available basis after July 29—**are designed to make the change-over as rapid as possible when the "go" signal comes.**

In sum, the four will encourage manufacturers to prepare detailed plans for bridging the gap between the ends of the German and Japanese conflicts. Thus, when the auto makers gathered in Washington on Friday to show WPB their blueprints, the atmosphere at least was favorable.

Remember always that this week's reconversion developments won't result in much civilian output. Hamstringing obstacles will be thrown in the way by those charged with meeting war production schedules.

Gasoline and fuel oil supplies may get more plentiful before the defeat of Germany, but we now are confronted with what the Petroleum Administration for War is calling a "two-month crisis."

It's an invasion crisis, as might be expected. Army declares its planes

THE OUTLOOK (Continued)

BUSINESS WEEK

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have flown more sorties than expected since June 6 because of (1) scant enemy air opposition, and (2) good flying weather. PAW figures it will take two months to make up this overdraft on stored supplies.

The strain falls on all branches of the oil industry and also on transportation, both in this country and on the seas.

One new record after another in crude oil production has been the saving factor (chart, page 20). Not even PAW foresaw this industry performance, although the agency is willing to take credit; two months ago top men feared output had passed its peak but they prodded wildcatters and producers successfully.

Next oil pinch—and it is beginning to be felt already—is to get supplies to the ahead-of-schedule offensive in the Pacific.

Commandeered tank cars are helping to meet demands in Europe now. But the program for building new tank cars is for the Pacific; these new ones won't be ready in time to fuel the "two-month crisis" in Europe.

Increased rail shipments of gasoline and other petroleum products already are flowing to the West Coast to make up the deficit caused by the unexpectedly rapid advance. And this traffic is bound to grow.

Operators of commercial motor vehicles should watch two new developments:

(1) **Office of Defense Transportation threatens a crack-down on owners who don't take care of their fleets.** Where it is detected that tires are abused, lubrication neglected, or replacement parts needed too frequently, operators will find it hard to buy new equipment.

(2) **Office of Price Administration wants qualified operators to stop giving drivers coupons (which drift into the black market) and to pay designated dealers by "ration check" for gas supplied to drivers.** This, it is hoped, will plug the biggest single leak in rationing.

Production of packaging materials—metal, glass, wood, and paper—this year will be the greatest in our history. Yet there won't be nearly enough.

Worst situation as far as civilians are concerned is in paper. This is clearly indicated by the War Production Board's proposal to hold down the amount allocated even to sanitary food containers.

To prevent further expansion, WPB already has started the squeeze on food containers by limiting producers of paper milk containers in future quarters to 100% of the paper and paperboard used in the final three months of 1943. **This is the first important restriction on use of paper for packaging perishable foodstuffs.**

Don't count on the bumper winter wheat crop to remove all danger of a grain shortage. Wheat helps, but corn (biggest livestock feed crop and the cause of so much trouble in 1943 and 1944) isn't in the crib yet.

Drought has hurt prospects in the Ohio Valley and all the states to the south of it. Iowa planted more acres than last year, but the seed went in late due to heavy rains and floods; yield for the tall corn state is put at 510,570,000 bu. by the Dept. of Agriculture—against 640,740,000 in 1943.

Drought, chinch bugs, grasshoppers, or early frost could play hob with this year's crop, now estimated as the fifth largest on record. Livestock raisers and corn millers remain on the anxious seat.

FIGURES OF THE WEEK

THE INDEX (see chart below).

PRODUCTION

	\$ Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
Steel Ingot Operations (% of capacity).....	95.7	94.3	97.1	96.7	96.4
Production of Automobiles and Trucks.....	14,600	19,335	18,930	18,090	19,435
Engineering Const. Awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$6,256	\$4,809	\$5,358	\$7,301	\$11,300
Electric Power Output (million kilowatt-hours).....	3,941	4,327	4,265	4,568	3,919
Crude Oil (daily average, 1,000 bbls.).....	4,579	4,587	4,523	4,357	4,090
Bituminous Coal (daily average, 1,000 tons).....	2,008	2,000	2,082	1,842	1,694

TRADE

Miscellaneous and L.C.I. Carloadings (daily average, 1,000 cars).....	84	82	82	74	81
All Other Carloadings (daily average, 1,000 cars).....	66	65	63	51	61
Money in Circulation (Wednesday series, millions).....	\$22,598	\$22,421	\$22,255	\$20,436	\$17,607
Department Store Sales (change from same week of preceding year).....	+12%	+14%	+7%	-6%	+39%
Business Failures (Dun & Bradstreet, number).....	21	36	22	31	33

PRICES (Average for the week)

Spot Commodity Index (Moody's, Dec. 31, 1931 = 100).....	249.4	249.1	249.8	247.5	243.8
Industrial Raw Materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	165.2	165.6	164.9	160.9	160.1
Domestic Farm Products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	224.4	224.3	224.0	218.5	210.4
Finished Steel Composite (Steel, ton).....	\$56.73	\$56.73	\$56.73	\$56.73	\$56.73
Scrap Steel Composite (Iron Age, ton).....	\$19.17	\$19.17	\$19.17	\$19.17	\$19.17
Copper (electrolytic, Connecticut Valley, lb.).....	12.00¢	12.00¢	12.00¢	12.00¢	12.00¢
Wheat (No. 2, hard winter, Kansas City, bu.).....	\$1.52	\$1.54	\$1.61	\$1.66	\$1.42
Sugar (raw, delivered New York, lb.).....	3.74¢	3.74¢	3.74¢	3.74¢	3.74¢
Cotton (middling, ten designated markets, lb.).....	21.99¢	21.80¢	21.45¢	20.09¢	20.98¢
Wool Tops (New York, lb.).....	\$1.340	\$1.340	\$1.340	\$1.280	\$1.370
Rubber (ribbed smoked sheets, New York, lb.).....	22.50¢	22.50¢	22.50¢	22.50¢	22.50¢

FINANCE

90 Stocks, Price Index (Standard & Poor's Corp.).....	105.0	103.6	98.8	94.3	99.1
Medium Grade Corporate Bond Yield (30 Baa issues, Moody's).....	3.57%	3.57%	3.60%	3.79%	3.82%
High Grade Corporate Bond Yield (30 Aaa issues, Moody's).....	2.72%	2.72%	2.72%	2.72%	2.69%
Call Loans Renewal Rate, N. Y. Stock Exchange (daily average).....	1.00%	1.00%	1.00%	1.00%	1.00%
Prime Commercial Paper, 4-to-6 months, N. Y. City (prevailing rate).....	1%	1%	1%	1-1/2%	1-1/2%

BANKING (Millions of dollars)

Demand Deposits Adjusted, reporting member banks.....	32,561	33,008	36,879	33,732	32,325
Total Loans and Investments, reporting member banks.....	56,262	55,036	50,032	49,527	45,563
Commercial and Agricultural Loans, reporting member banks.....	6,037	6,027	5,870	6,335	5,565
Securities Loans, reporting member banks.....	3,742	3,648	1,836	1,946	1,512
U. S. Gov't and Gov't Guaranteed Obligations Held, reporting member banks..	41,048	39,917	37,027	36,033	32,987
Other Securities Held, reporting member banks.....	2,931	2,955	2,850	2,791	2,983
Excess Reserves, all member banks (Wednesday series).....	1,500	1,500	800	971	1,229
Total Federal Reserve Credit Outstanding (Wednesday series).....	15,085	15,423	15,183	12,372	8,117

* Preliminary, week ended July 8th.

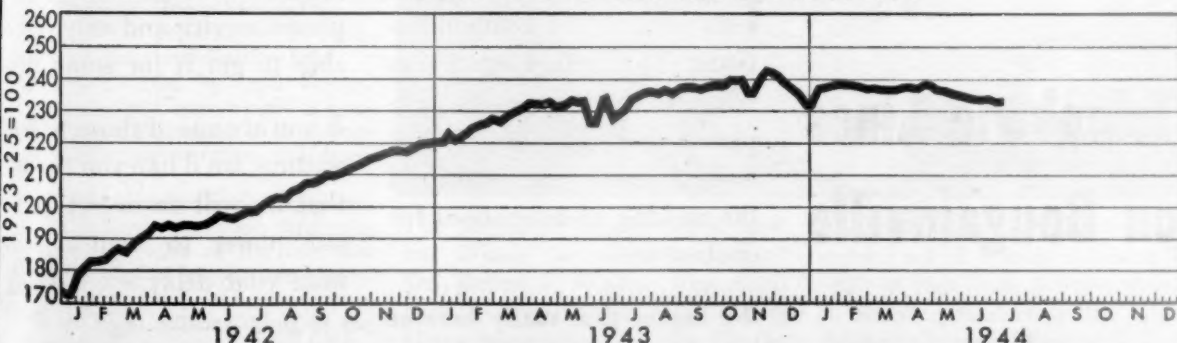
† Ceiling fixed by government.

‡ Revised.

Index revised for first six months of 1944 (BW-Jul.8'44,p34).

\$ Date for "Latest Week" on each series on request.

BUSINESS WEEK INDEX OF BUSINESS ACTIVITY





U. S. MARINES ON BOUGAINVILLE use palm trees for telephone poles as they string communication lines. Two stand guard with carbine and sub-"machine" gun.

Telephone Lines on Bougainville

THIS is a war of communications. The farther our forces advance, the more wires, telephones and switchboards they need. And war stopped the making of telephones for civilian use.

We regret that many here at home cannot now get tele-

phone service and may not be able to get it for some time.

If you are one of those who are waiting, we'd like you to know that we will do everything in our power to minimize your delay.



BELL TELEPHONE SYSTEM

Rivalries Beset Monetary Pact

Bretton Woods conference will hammer out an agreement, but progress toward world trade fund, eyed closely by Congress, has been slowed by disputes on how nations will participate.

Scenery around Bretton Woods, N. H., was at its best this week, but U. S. delegates to the international monetary conference were in no mood to appreciate summer resort atmosphere. Uncertain of their support at home and squeezed between conflicting demands of foreign representatives, they were working stubbornly to pull together an agreement that would get the support of participating countries and the approval of the U. S. Congress.

Tough Obstacles—Optimistic progress reports do not conceal the fact that the conference has run up against several unexpectedly tough obstacles. These difficulties probably won't be enough to keep the conference from reaching an agreement of some sort, but inevitably they will crop up again when the time comes for the various nations to ratify the work of their delegates.

Trouble has arisen in spite of the fact that the conference started out with a statement of general principles representing the consensus of the experts of 80-odd nations (BW—Apr. 29 '44, p16). So far the delegates haven't backed down on any of these broad policies. The argument begins when they try to translate the general principles into specific commitments.

Three Commissions—Immediately after its first meeting two weeks ago, the conference divided itself into three commissions and settled down to the business of hammering out a detailed agreement.

One commission, headed by Secretary of the Treasury Henry Morgenthau, is working on the proposal for an international currency stabilization fund.

Another directed by Lord Keynes, Britain's economic heavyweight, is blueprinting the international bank to handle loans for reconstruction and development.

The third commission is taking care of miscellaneous problems, including the touchy question of the role that silver is to play in international settlements.

Pool of Eight Billions—Most of the argument so far has centered around the currency stabilization fund. As the statement of the experts pictured it, this was

to be an \$8,000,000,000 pool, made up partly of gold, partly of the currencies of member countries. Its function would be to provide participants with the currencies they needed to settle international balances. Members would start the fund off with an initial subscription of gold and currency. After that, any member could buy another member's currency from the fund in exchange for its own currency, subject to certain limits.

According to this plan, the stabilization fund would take no part in the ordinary process of offsetting balances and making transfers. Member countries would come to it only when a particular currency was in short supply on their money markets. By selling them the scarce currency, the fund would prevent violent fluctuations in exchange

rates and the resulting squeeze on the economies of countries that happened to need a scarce currency to settle their international commercial balances.

How Much From Each?—The first—and in many ways the toughest—problem that the conference encountered was to find a formula for determining each country's subscription—a formula taking into account such things as volume of trade, gold stocks, national income, and the like. This involves the national pride and self-interest of all participants because quotas will determine not only the members' liability but also their voting rights and the extent to which they can draw on the resources of the fund.

Before the conference started, experts had run off some desk-pad calculations which would have put the U. S. down for about \$2,500,000,000 of the \$8,000,000,000 total. On this basis, Britain would subscribe roughly \$1,300,000,000, the second largest quota; Russia somewhere between \$800,000,000 and \$1,000,000,000, and China about \$550,000,000.

Russians Object—As soon as the sessions got under way, Russian delegates



The American lineup at scenic Bretton Woods (seated left to right): Sen. Robert F. Wagner, Rep. Brent Spence, Secretary of the Treasury Henry Morgenthau, Jr., Sen. Charles W. Tobey; (standing) Harry D. White, director of the Treasury's

monetary research; Stabilization Director Fred M. Vinson, Assistant Secretary of State Dean Acheson, Edward E. Brown, president of the Federal Advisory Council; Marriner S. Eccles, chairman of the Federal Reserve System, and Rep. Jesse P. Wolcott.



WORKING TOGETHER

Recent ceremonies at Willow Run and Flint, Mich., graphically illustrate a technical wartime alliance between two of peacetime's biggest competitors—Ford and General Motors. Marking one of these occasions, Henry Ford II follows the suit of his famous grandfather (above) by autographing the 5,000th B-24 Liberator bomber built by Ford. At the Buick plant, Harlow H. Curtice, General Motors vice-president, stands by the 50,000th Pratt & Whitney engine (left) his firm has built—for Liberators.

knocked the props from under this neat equation by demanding a larger quota. Russia's prewar foreign trade, they argued, is no longer a fair measure of the commerce it intends to have after the war, or of the figure it intends to cut in European affairs.

To meet this crisis the technicians ran off a new set of figures and came out with a quota scale that delegates have accepted tentatively. The latest lineup calls for total contributions of \$8,500,000,000, of which the U. S. would put up \$2,750,000,000, Britain \$1,300,000,000 as under the previous plan, Russia \$1,200,000,000, China \$550,000,000, France \$450,000,000. This arrangement is fairly acceptable to all the major participants except the British.

● **Gold Proposals Balked**—Along with the question of quotas, the commission of the stabilization fund has been wrestling with the problem of gold contributions. The first consensus of experts was that each country should put up either 25% of its quota in gold or

10% of its gold supply, whichever was smaller.

Several countries, including Russia, balked at this and asked for a special loophole. The U. S. delegation, already sensitive to the charge that it is trying to give away the country's gold stock, has been holding out against these suggestions.

● **Economic Autonomy**—Questions of quota assignments and gold contributions probably can be solved by some diplomatic horse trading. There is one basic problem, however, that underlies all the others, and on that the conference shows no signs of coming to terms. It is the question of how much the actions of the fund or some other international agency will be allowed to influence the commercial policies and internal economies of member states.

All the countries participating in the Bretton Woods conference are on record as favoring international monetary stabilization. Most of them are also on record as insisting on complete freedom to handle their own internal currency

problems. These two principles turn out to be mutually exclusive.

● **Balance in Trade**—Unless the countries involved in world commerce can work out a method of keeping the trade in rough balance, any currency stabilization plan is bound to fail. The United States, for example, insists on exporting its surpluses without offsetting import, the supply of dollars on the world money market will dry up. Other countries then will resort to currency devaluation and blocked accounts in an attempt to avoid the squeeze.

The most telling argument against the currency plan, therefore, is that it puts the cart before the horse. It sets out to establish machinery for making international payments without doing anything about the factors that determine the size and direction of those payments.

● **When Gold Runs Out**—As yet, the delegates at Bretton Woods have not tackled this problem head on. The closest they have come to it was deciding that, when necessary, member nations would have to sell additional quantities of their currencies to the fund in exchange for gold. This means that as long as it has gold, the fund will be able to replenish its supply of scarce currencies, but there is no provision for the fund to follow when the supply of gold runs out.

U. S. delegates realize that no matter what agreement the conference reaches they will have a hard time selling it to Congress. American bankers already have come out solidly against any commitment along the lines of the consensus of experts. Congress is watching suspiciously for any indication that the U. S. is giving away its gold or sacrificing control over its currency.

The only thing that makes the problem easier is the fact that foreign representatives know what the U. S. delegation is up against. Since they are counting on the U. S. to be the principal underwriter they know that they must lay out an agreement that stands a fair chance of getting by Congress.

● **Bank Faces Hurdle**—The same obstacles that lie in the way of currency stabilization also apply to the plan for a \$10,000,000,000 reconstruction bank, which is being worked out by the Keynes commission. If the currency plan bogs down either at Bretton Woods or later at Washington, the bank plan probably will, too.

The reconstruction bank has one thing in its favor, however. The process of lending money is a fairly simple operation. Congress and the country find it easier to understand than currency stabilization. Hence, the bank might get approval as a rehabilitation measure when the currency plan would be smothered in economic debate.

Farmers in Clover

Cash income this year is soaring toward 22 billions, almost three times as great as prewar average of 8 billions.

Prospects for farmers' cash income (including government payments) in 1944 now are soaring toward \$22,000,000,000. Earlier there had been some doubt that the figure would go much above 1943's record of \$19,900,000,000.

● **Spurt in Wheat**—The tide began to turn last week. Commodity Credit Corp. was face-to-face with the revised law extending the stabilization act (BW-Jul.1'44,p15). The Bankhead amendment to that law, rewritten in a last-minute compromise, called on the President to attempt to keep prices of major crops at parity or at the best level between January and September, 1942, whichever is higher.

Response of Commodity Credit was to place heavy buying orders in the sagging grain markets and to raise its loan price on wheat harvested in 1944. These actions brought a spurt in wheat prices (and cotton, the other big cash crop which recently had been selling below parity, went up without CCC support).

● **Earnings Compared**—Cash farm income this year of \$22,000,000,000 (including receipts from marketing of crops and livestock, plus government subsidies and benefit payments) would compare with a 1934-38 average of \$8,100,000,000—by way of showing how war has increased the farmer's take (cover chart).

Almost half the increase above last year's total has already been banked or is owing to farmers on conservation and dairy feed subsidy payments. Including feed payments totaling \$400,000,000 this year, the dairy farmers alone will hit the jackpot for \$3,500,000,000. Last year their take was \$2,800,000,000. More cows are being milked this year; the total output of milk may be a little larger than in 1943. Prices also have been a little higher.

● **Lower Prices, More Pigs**—The hog will run the cow a close second as a mortgage lifter this season, turning in better than \$3,000,000,000 as compared with \$2,900,000,000 in 1943. Prices have been lower to date, but this has been more than offset by record marketings from 1943's whopping spring and fall pig crops.

Hog slaughter will be considerably smaller during the second half of the year, while prices are expected to average higher. The 28% reduction in 1944 pig crops (BW-Jul.8'44,p21) won't be

reflected in income until early next year.

But the sow has no cinch as second-place income producer. The beef critter is expected to yield better than \$3,000,000,000 this year against \$2,600,000,000 in 1943. This would mean a record volume of cattle and calf slaughter off the ranges through December.

● **Poultry Is Fourth**—Biddy, the hen, will pull up fourth with an expected total of better than \$2,500,000,000 as compared with \$2,400,000,000 last year. Prices of poultry and eggs have been below last year's figures, but eggs are expected to do better soon. Larger volume thus far in the year has just about offset the lower prices.

About 70% of the total cash income this year will be from these and other livestock sources including sheep, lambs, and wool—the total projected close to \$13,000,000,000 as compared with \$11,350,000,000 last season.

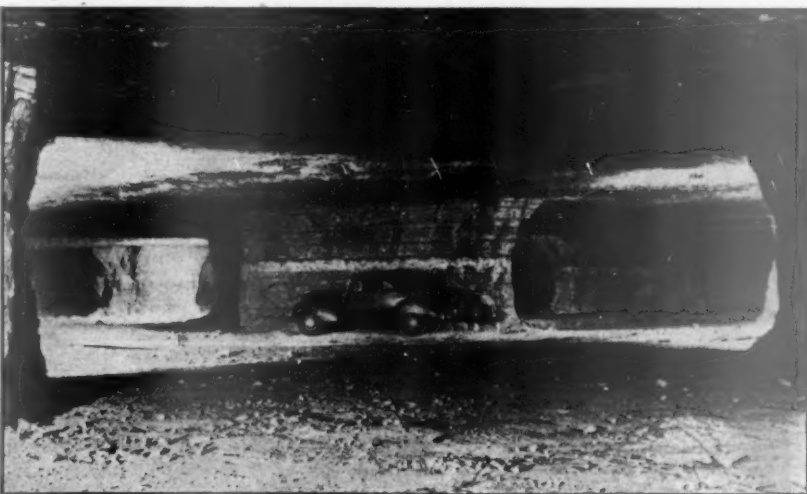
● **Bulge in Crops**—Cash from crops—to total about \$9,000,000,000 against \$7,900,000,000 in 1943—is principally from cotton, vegetables, fruits and nuts, food and feed grains, tobacco, and oilseeds. All are expected to yield bigger cash returns this year.

From cotton and cottonseed, the cash take should top \$1,500,000,000 against \$1,400,000,000 last year, the increase coming from higher prices (to be kept at parity, if CCC continues to support prices as in wheat), offsetting a smaller expected crop volume.

Truck crops and potatoes should yield better than \$1,700,000,000 on larger volume and higher prices as contrasted with \$1,530,000,000 in 1943. Fruits and nuts also should bring more cash—possibly better than \$1,300,000,000 against \$1,160,000,000 last year—because of a much larger harvest this season.

● **Wheat Is Higher**—Wheat may yield up to \$1,300,000,000 against \$800,000,000 last year on considerably higher prices and an indicated bumper crop of 1,128,000,000 bu. In June, the price received by farmers was 20¢ a bu. higher than a year earlier, and with current support should average still higher.

Corn should top \$800,000,000 of cash as compared to \$700,000,000 last year, on prospects for heavier sales to distillers and other processors. Close to 100,000,000 bu. may be distilled for beverage and industrial alcohol as con-



WFA'S FOOD MINE

A 75-year-old limestone mine near Atchison, Kan., provides the nation with its biggest refrigerated warehouse and its first big underground food storage space. Under a lease between the War Food Administration and Kerford Quarry Co., 12,000,000 cu. ft. of caverns will be used to ease the critical shortage of coolers. That space is equal to about 9% of the country's refrigerated storage, and would cost about \$15,000,000 to build. WFA, however, is spending only \$1,000,000

for refrigeration machinery to reduce the mine's natural temperature of 50F to 30F. Bratticing and a new drift entrance will permit the firm to continue production of railroad ballast and construction stone while WFA keeps some 75,000 tons of government-owned lard, meats, fruits, and eggs in its huge cache. Rail sidings to the mine will bring the first stores about Aug. 1. Meanwhile, WFA is considering some of the abandoned mines in Oklahoma for its food storage, and every cave owner in the country is watching hopefully.

trasted with little more than 30,000,000 bu. last year.

● **Tobacco Record Topped?**—Tobacco growers raked in a record \$557,000,000 last year, but should do even better this season on a bigger crop and higher prices in domestic and export markets. Producers of soybeans, peanuts, and flaxseed will cash more than \$700,000,000 against \$611,000,000 last year, on larger production and higher government support prices.

In addition to the \$22,000,000,000 of cash from farm crops and livestock, farmers will benefit to the tune of \$3,000,000,000 on home-grown food consumed on the farm and rental value of farm dwellings. This noncash income in 1943 was about \$2,800,000,000.

● **Costs Are Greater**—But production costs also will be bigger (principally because of higher costs of feed and labor), the total to bulk more than \$11,000,000,000 as compared with \$10,617,000,000 paid out last year. More than \$1,200,000,000 of costs will be the rental charges paid to landlords who are not on farms.

The government economists put in another item of income—from work off the farms and from investments of one kind or another—a total of \$3,800,000,000 in 1943, and at least an equivalent amount this year.

Producers Alerted

Trust buster steps into an obscure movie-booking case, serving notice that old antitrust suit hasn't been forgotten.

Hollywood movie producers have learned to take in their stride the antitrust actions that exhibitors chronically bring against them. But last week developments in a Philadelphia case made them sit up sharply and take sharp notice.

● **Personal Appearance**—The alert sounded for them when William Goldman, independent theater chain operator in the Quaker City, filed in the Third Circuit Court an appeal from the U. S. District Court decision that threw out his \$1,350,000 triple-damage suit against eleven major motion picture producing companies which, he charged, had withheld first-run pictures from him (BW—Apr. 15 '44, p98).

That was purely routine, for the industry expected Goldman to appeal. What set the producers on edge was the fact that Assistant Attorney General Wendell Berge of the Dept. of Justice's Antitrust Division showed up on the

scene and proceeded to file a petition seeking permission to submit a brief as amicus curiae.

● **Intervention Opposed**—Why the movie producers asked themselves, was the D. of J. suddenly interesting itself in this comparatively obscure case? They weren't long in doubt. Berge told the court that its action would have an important bearing on a pending case brought by the department against Paramount, et al, in New York. Company attorneys sought at once to block participation of the Antitrust Division in the Philadelphia case.

Movie companies long since had ceased to regard the New York action as a pending case, for this is the suit out of which grew the famous consent decree under which the movie producers agreed to abandon the block booking method and sell films only in groups of five, to curtail their acquisition of theater outlets, to establish arbitration procedures for exhibitors, and to undertake other reforms.

● **New Decree Snagged**—That decree expired Nov. 30, and ever since then Assistant Attorney General Tom C. Clark, who has been handling the case since Thurman Arnold left the department, has been trying to negotiate a new one (BW—Jan. 8 '44, p74). Ostensibly he has been trying to draw up an instrument which would more nearly satisfy the exhibitors by guaranteeing them, among other things, more liberal privileges in canceling scheduled pictures and reducing the clearance or time lapse between first-run and second- or third-run houses.

But Clark has had an understandable hard time in bringing the producer-distributors around to acceptance of a tougher decree. They are relatively satisfied with the old measure and are continuing to operate according to its terms even though it is legally no longer in force, but that's as far as they are willing to go.

● **An Accelerator**—Entrance of the Antitrust Division into the Philadelphia case is obviously calculated to bring the distributors to terms more quickly.

Meanwhile, weary of the recurrent rumors that Clark has just about brought the distributors to terms—rumors that were circulating just as widely this week as they were six months ago—exhibitors have continued to take matters into their own hands and seek relief in the courts. Last month, 24 independent operators in Pittsburgh asked a federal court to give them relief from licensing agreements imposed by distributors, from being forced to show specified pictures at preferred times, and from paying more for their films than theaters operated by the distributors.



THEY KNOW THE ANSWERS

Because the wartime flood of inexperienced travelers has so overwhelmed information booths in Chicago's Union Station, a bevy of roving

information girls eases the load by answering less involved queries. Uniformed in blue, the six girls help passengers waiting in lines before the booths, and provide answers to 85% of all inquiries put to them.

Foundry Crisis

Military truck program hard hit by critical shortage of iron castings. Foundrymen seek labor and price relief.

Foundrymen are squeezed between manpower shortages and price control regulations to which they ascribe their production lag. The No. 1 critical war material is now, and for several months has been, iron castings (BW—May 13 '44, p. 36).

● **Pledge Cooperation**—Last week 300 operators met in Chicago for a mid-west conference of the Gray Iron Foundries' Society, Inc., and decided—not too optimistically—to cooperate with the program that the government has drafted to get more castings out.

Also, the delegates appealed to President Roosevelt to get draft deferments for employees, and furloughs for the skilled foundry workers now in the armed forces.

● **15,000 Men Sought**—W. B. Murphy, WPB's deputy vice-chairman for production and cochairman of a newly formed National Foundry & Forge Shop Committee representing five federal agencies (BW—Jun. 24 '44, p. 88), assured the conference that the industry's problems will be given top-side attention.

The War Manpower Commission is conducting a strenuous recruiting program to obtain 15,000 husky men for the 300 foundries and forge shops which have been placed on the critical list.

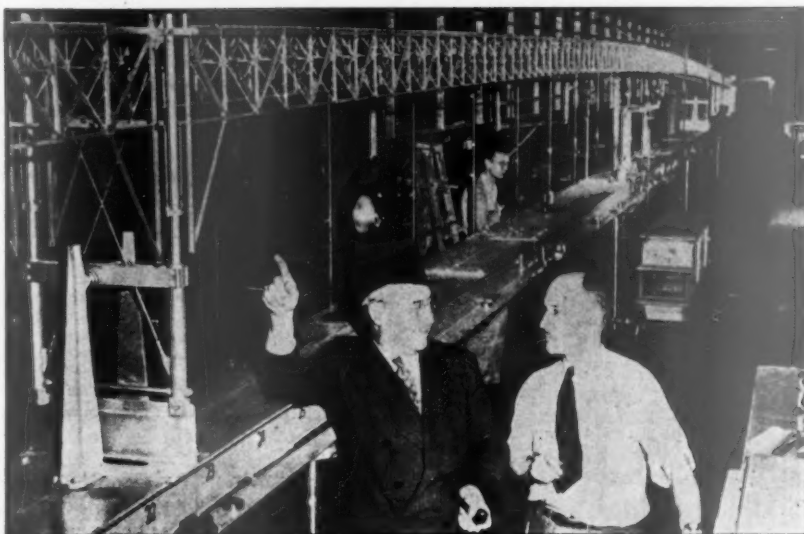
The National War Labor Board, OPA, and WPB are being urged to give immediate consideration to wage and price cases, and to priorities on new equipment.

● **Production Hampered**—Such solicitude has not always been shown the industry by government agencies, foundrymen claim.

Washington originally believed that this would be a war of steel, not iron. The gray iron foundries booked few orders, consequently lost much of their labor to other concerns. Resultant shortages of iron castings hampered production of trucks, landing craft, engine heads, and blocks.

● **Truck Program Lags**—Gray iron foundries' production this year will probably be 11,000,000 tons, 78% of the country's ferrous castings. These plants are now under pressure for greater output.

In June, the heavy truck program was 32% behind schedule, with 75% of the lag traceable to lack of castings. This month a 25% increase in production



TESTED FOR GALES

University of Washington's Prof. F. B. Farquharson (right) and C. E. Andrew, state highway engineer, stand beside a windproof model of a suspension bridge to replace the one that blew down at Tacoma four years ago.

of heavy trucks is needed; the 1944 military equipment program requires gray iron castings for 2,600,000 engine units.

● **Stepups Demanded**—The military program demands a 10% stepup by Aug. 1, and another 10% by Sept. 1 in the production of the 95 gray iron foundries which are listed as critical.

The need for automotive-type castings, particularly cylinder blocks and heads, is considered desperate.

● **More Women Sought**—Government representatives urged foundrymen (1) to emphasize the importance of castings to the war program in recruiting labor; (2) to improve their labor relations; (3) to boost the proportion of women employees from the present 12% up to 25%; (4) to increase the use of labor-saving machinery, (5) to improve their presentation of cases before OPA and NWLB for price and wage adjustments, and (6) to sponsor an intelligent training program.

● **Obstacles Bemoaned**—Foundrymen admit that their jobs are not for weaklings, but they bemoan their need to overcome the adverse publicity about foundry wages, and working conditions, since highly placed government officials began sounding off on the subject.

Foundrymen ask how, if foundry jobs are so undesirable, their industry has maintained a monthly labor turnover rate of 8.62% compared with 9.2%

In unique "wind-tunnel" tests the 100-ft. scale model has withstood 120-m.p.h. gales. Heavier construction planned for the new span promises it longer life than its \$6,400,000 predecessor which collapsed into Puget Sound during a windstorm—only four months after dedication.

for 17 other industries. Also, can it be so undesirable when more than 65% of present employees have worked five years or more in the industry?

Average hourly earnings for gray iron foundry employees is cited as \$1.05, compared with \$1 for all manufacturing. A survey of 60 critical foundries showed wages up 22% on the average since Pearl Harbor.

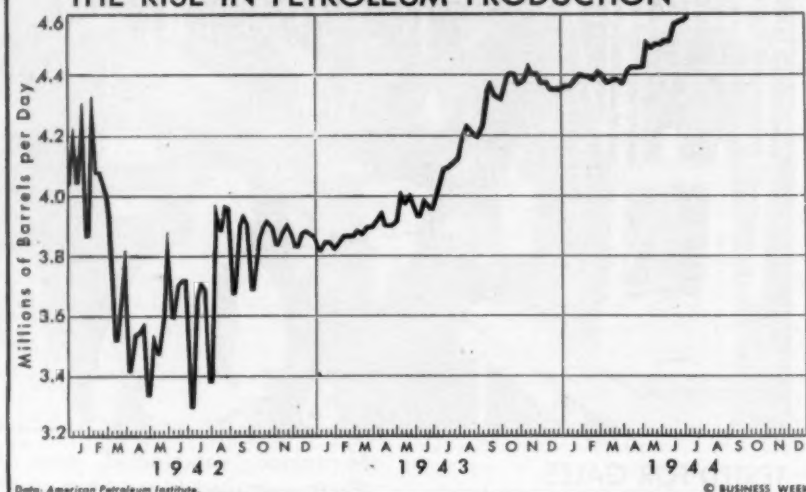
● **Loans Studied**—Employing normally 200,000, the gray iron industry urgently needs an additional 30,000 workers. All hope of recruiting Mexican labor has collapsed. Because 30% of foundry manpower has been drafted, the industry feels that it deserves deferments and industrial furloughs while the crisis persists.

To help foundries mechanize, WPB is working up a plan to provide equipment loans, and painless means of amortizing these. Foundrymen complain that their surpluses were caught in the wringer between rapidly rising costs and frozen price ceilings.

● **OPA Defends Methods**—OPA permits foundries a 4% profit. Foundry owners contend that the base period 1936-1939 is unfair because production was below normal in those years, hence discourages production of castings.

OPA has promised prompt attention to cases needing individual adjustment, but defends present methods of fixing price ceilings as generally adequate.

IN THE OUTLOOK: THE RISE IN PETROLEUM PRODUCTION



About 5% more oil products than expected are available now as invasion pushes needs to a peak. For crude oil output has inched ahead steadily of late, whereas Washington had anticipated a slight decline. Production fell off from a record in early 1942 as U-boats disrupted tanker shipments, until improved transport permitted a

gradual recovery into 1944. Recently, wells are figured to be producing at capacity, with some fields gradually being exhausted; but output has stepped up nonetheless. Hence, the outlook for home-front driving, heating, and lubricating—primarily tied to war demands (page 9)—may be improved by further production gains.

Furniture Blues

Supply will not increase in the last half of 1944 because of lumber control and scarcity of labor and fabrics.

Buyers who stormed the display rooms of Chicago's American Furniture Mart two days before the summer market opened last week, were harried by an awareness that the War Production Board's new lumber control order L-335 (BW-Jun.24'44,p17) isn't going to make furniture any more plentiful in the next six months.

• **Individual Cuts**—Actually, L-335 is a blow that the industry has been expecting ever since the war began. But it wasn't lightened any by the confusion that arose as manufacturers received their specific allotments from WPB's furniture branch last week.

They had expected a straight percentage cut—possibly paring of the current restriction of 84% of 1943 lumber usage as low as 65%. Instead, each user's quota is figured individually, according to his inventory requirements, and end use.

• **Clarification Expected**—Basis of this calculation is Form 3640, which all users of more than 50,000 b. ft. of lumber per quarter filed with WPB this spring.

Inevitably, some manufacturers were pleased with their quotas, some dismayed. While buyers pleaded for merchandise, manufacturers hopefully awaited further directives which WPB is expected to issue, and which may clarify their situation.

• **Shipments Allocated**—Most manufacturers' representatives agreed that buyers could have obtained their quotas of merchandise without coming near the market, since all shipments are strictly according to allocations varying from 30% to 100% of average prewar purchases, and very few houses are accepting new accounts.

Nevertheless, dealers apparently take comfort in learning the supply outlook first hand, even if it is generally conceded to be the darkest in the history of the trade.

• **Labor Is Scarce**—While lumber will be the limiting factor in the next few months of furniture production—and many manufacturers consider L-335 "just another hunting license"—shortages of labor and "covers" (upholstery fabrics) are nearly as acute.

A survey by Seidman & Seidman, furniture industry accountants, indicates that the industry now has 20% fewer employees than in 1941, and that 1943 saw a 10% decline in employment from the previous year.

But at least some manufacturers consider that by now they have probably lost most of the employees that could be drafted, or lured to other industries, and hence their employee loss should level off, at however unsatisfactory a figure.

• **Fabrics Scarce**—The shortage of covers stems from the cotton spinning industry's glut of war orders. Practically all rayon and wool upholstery fabrics include some cotton, and even "100% mohair" has a cotton backing. Pile fabrics, like plush and velvet, are even scarcer than flat goods.

The more optimistic leaders in the trade hope that Allied military successes this year may divert some spinning capacity from war orders to cotton yarns for civilian use; the more realistic look for little improvement in the next few months.

One large, well-established furniture house ruefully admits that within two or three months it will have to withdraw the traditional privilege of retailers to choose colors and weaves in upholstered furniture. Instead, buyers will have to be content with materials selected at the factory from whatever fabrics are available at the moment.

• **Packaging Problem**—Packaging and crating materials remain critically short, but not to the extent of hampering shipments.

Manufacturers manage to find odd lumber for pieces requiring crating, and make unpackaged shipments to nearby points by truck. Here the small town dealer is sometimes at greater disadvantage than his big-city competitor, since he is often too far from his sources to receive uncrated truck shipment and cannot qualify for railroad carload quantities.

• **Appliances Exhibited**—By far the brightest note in the show was the bustling Appliance Mart, where most of the country's major appliance manufacturers held open house to retailers and proffered information on postwar distributorships.

Coolerator Co. unveiled its two new food freezing units (one for home use, a larger model for farms). Other exhibitors were more cagey as to details, but indicated near-miracles in household appliances after the war.

Westinghouse Electric & Mfg. Co., whose Laundromat (automatic washing machine) stopped traffic at the January show, this time showed nothing but a teletype to inform buyers on world affairs, chairs to rest their feet, and con-

...eration calculated to retain their good-
will. But next door, interest of buyers
in the Bendix automatic washing ma-
chine demonstration was as lively as
ever.

Four New Products—Significantly, the
Norge division of Borg-Warner Corp.
announced this week to announce four new
products to be added to its line "as soon
as conditions permit"—home and farm
freezers, automatic cycle washers, home
and office unit room coolers, and an
automatic clothes dryer.

nese to participate in war production by
providing war jobs in which a knowledge
of English is no requisite, and to cre-
ate a nucleus for China's future aviation
industry.

Within a year more than 3,000 Chi-
nese workers, 200 of whom have been in
training at Douglas Aircraft in southern
California for nine months, will be pro-
ducing aft fuselage sections for the new
Douglas attack bomber, which is an
improvement on the A-20 "Havoc"
upon which production was halted re-
cently (BW—Jun. 3'44, p7).

With visions of producing complete
airplanes in two or three years, corpora-
tion officials expect eventually to trans-
port the whole setup to China or estab-
lish similar plants there, combining
American technology with Chinese man-
power to supply that country's urgent
need for large quantities of planes.

• **Springboard?**—Located in San Fran-
cisco, where 40,000 of this country's
80,000 Chinese reside, China Aircraft
well may be the focal spot of China's
postwar industrial revolution.

Financed by a \$500,000 loan from
Defense Plant Corp. for facilities, the
plant covers 80,000 sq. ft.; construction
was started in May. The Chinese govern-
ment carried out diplomatic negotiations
while Douglas, eyeing a potential Chinese
market, provided technical assistance.

• **Looking Ahead**—China Aircraft, in-
corporated under the laws of California
and capitalized at \$250,000, is owned
totally by 30 large Chinese families,
who raised funds within two weeks.
After the war when U. S. aid is with-
drawn, the corporation intends to con-
tinue turning out airplanes through
support by the Chinese government, in-
ternational marketing programs of
Douglas and other aircraft companies,
and additional stock issues which may
be sold to Americans as well as Chinese.

Dr. Hu Seng-Chiu, one of China's
outstanding aeronautical engineers, was
one of the founders of the project. He
originally submitted plans for the proj-
ect to Mme. Chiang Kai-shek in March,
1943. As director, vice-president, and
chief engineer of China Aircraft, young
Hu negotiated for 15 months with the
State, War, Navy, and Treasury depart-
ments, the Immigration Office, War
Production Board, War Manpower
Commission, Alien Property Custodian,
Selective Service, Defense Plant Corp.,
Chinese Embassy, and Washington of-
fice of the Chinese Air Forces.

• **Legal Hurdles Cleared**—Proposing the
program as a Chinese corporation in-
stead of a Chinese government under-
taking to eliminate legal restrictions, Hu
nevertheless had to obtain exemption
from the 1926 Army Air Corps Act to
permit an alien organization to act as a
defense manufacturer for the U. S.



FORCED LANDING

For the second time in a year, Nor-
man Armour, U. S. ambassador to the
Argentine, has been recalled from
Buenos Aires as a protest against the
pro-Axis activities of the Argentine
government. This time, the British
—frightened by the threat of expro-
priation of foreign-owned property
(BW—Jul. 8'44, p112)—have cooper-
ated by recalling their ambassador.
Economic sanctions against Argen-
tina are under discussion, but Great
Britain refuses to stop buying Argen-
tine meat because it provides England
with its basic wartime supply.

Hu, with a B.S. degree from Chiao-
Tung University, Shanghai, China, an
M.S. from Rensselaer Polytechnic In-
stitute and a D.Sc. degree from Massa-
chusetts Institute of Technology, is an
engineer of wide experience despite his
youth. Awarded the Salisbury prize for
attaining the highest scholarship record
in M.I.T.'s graduate school, he has been
on engineering staffs of the Tien-Chien
Engineering Co., General Electric Co.,
Berger Manufacturing Co., Zap Aero-
nautics Corp., Vought-Sikorsky Aircraft
division of United Aircraft Corp., and
was a chief engineer of the Aerojet En-
gineering Corp.

Shuck Ho, president of the San
Francisco branch of the Chinese asso-
ciation for promotion of aviation, is
chairman of China Aircraft's board.
B. S. Fong, chairman of China War Re-
lief Assn. of America, director of the
Chinese Chamber of Commerce.

Chinese Pitch In

Plane subassemblies to start
rolling next month from Cali-
fornia plant staffed and financed
exclusively by Chinese.

Joining the march of U. S. produc-
tion, China Aircraft Corp., an all-Chi-
nese organization in San Francisco (BW
—Sep. 4'43, p14), will begin operations
in August under a one-year contract
with Douglas Aircraft Co. as the first
and only project where a nationalist set-
up is used as part of this country's air-
craft production program.

• **Manpower Pool**—Founded with the
blessings of Generalissimo Chiang Kai-
shek and the U. S. Army Air Forces
Materiel Command, China Aircraft is
designed to utilize Chinese manpower in
this country and fulfill desires of Chi-



As founder, director, vice president,
and chief engineer of San Francisco's
new China Aircraft Corp., 25-year-old
Dr. Hu Seng-Chiu is one of its most
ambitious postwar planners.

What About Oil?

U. S. petroleum output in 1947 may fall 500,000 bbl. a day short of demands. Then the Caribbean will come to rescue.

It may be too early in the war to assess the importance of each nation's military contributions. But in oil products, comprising more than half the supply tonnage for all invasion fronts, there is no argument. The U. S. oil industry predominates in this war, as it did in world markets before the war. It is furnishing about 89% of the oil now flowing into the United Nations' war effort.

● **Effect on Reserves**—The industry gets a justifiable tingle out of such figures. The question, "What's next?" brings an equally justifiable shiver. Will all this outpouring of American oil reserves (15% of world oil in the ground; production to date, 60% of the world's supply) leave us in a weakened condition for postwar activity in world markets?

Some experts say that oil production in the United States will decline sharply within a few years after the war. However, this country could continue to produce oil at its present rate (about 4,900,000 bbl. daily), and at the same time lose its oil-producing leadership. This could take place if a few other countries, such as Russia, Iran, Saudi Arabia, and Venezuela, begin to realize the potentialities of their own oil reserves.

Whether these countries will increase their oil production and refining, and how much, are questions that turn on how cheaply and efficiently they can produce oil and deliver it to their markets, what refining facilities may be available, and how well they can meet competition from established oil producing areas.

Unless the benefits of industrial civilization—and consequently a greater demand for oil products—can be extended to the industrially underdeveloped countries, it doesn't seem likely that risk capital would undertake to expand world oil production after the war.

● **Deficit Forecast**—U. S. oil production before the war was fully equal to the job of filling domestic demand, with about 15% left over for export. After the war, according to some carefully prepared trade estimates, there will be a temporary surplus of 5% to 15% available for export, and later a deficit in domestic supply.

By the end of 1947, say these estimates, domestic production will fail to

meet demand by about 500,000 bbl. daily.

● **Caribbean Supply**—This deficit is expected to be met by increased production in Venezuela, Colombia, and other areas bordering the Caribbean in Latin America. Caribbean area production now is estimated at around 800,000 bbl. daily. It is being increased to about 1,100,000 bbl. Significantly, 59% of it is owned by U. S. oil companies.

Standard Oil Co. (N. J.), the largest U. S. oil interest, has concluded from its studies that two years after the war ends, domestic oil production will be back at the 1944 level. The year after the war ends in Europe, it expects domestic demand to drop only 11.5% from this year's peak.

● **Temporary Surplus**—In the first two years after the war, at least, there is expected to be a surplus of oil in the world markets. But the intensity with which major oil companies are expanding their holdings, and the bitter controversy over merits of the Arabian pipeline project (BW-Mar. 4'44, p19), indicate that any such surplus is expected to be a temporary situation, possibly until the number of automobiles in use can be brought back to the pre-war level.

While the Arabian pipeline project has been held up (BW-Jun. 10'44, p7), it is not dead. Owners of the Saudi Arabian oil concession, Standard of California and the Texas Co., expect the line to be built, although nobody will predict what part the U. S. government will take.

● **Persian Gulf Field**—Present output of all oil fields in the Persian Gulf area

totals only 450,000 bbl., and of this 50,000 bbl. daily of heavy residual oil is being pumped back into the formations in Iran, leaving a net of 400,000 bbl. daily.

Saudi Arabia alone, in the opinion of some oil men, could rival the U. S. in daily oil production whenever a market for it develops. Looking toward eventual development of Persian Gulf oil, these oil men predict that the war price structure, now based on products adjoining the Gulf of Mexico (principally Texas), may move to the Near East.

● **Transportation Costs**—But for the early postwar future, Persian Gulf oil is not expected to compete for the U. S. market because of high transportation cost.

Production costs in the Caribbean and in the Persian Gulf areas, are believed to be fairly competitive. In either area, oil can be produced for one-fourth to one-third the cost of average major company costs of producing oil in this country. But to this must be added government royalties (estimated 21¢ a bbl. in Saudi Arabia, 23% of price at the well in Venezuela), transportation, and tariff, now 10.5¢ a bbl.

Coming into the U. S., Arabian oil would have to pay—without benefit of the projected pipeline—19¢ a bbl. from Abadan to Suez; 17¢ toll through the Suez; 39¢ from the Suez to New York—a total of 75¢ a bbl. Venezuelan oil, however, could be shipped into the country with tanker costs ranging around 20¢ a bbl.

● **Market in Europe**—This indicates the logical market for Arabian oil is Europe.



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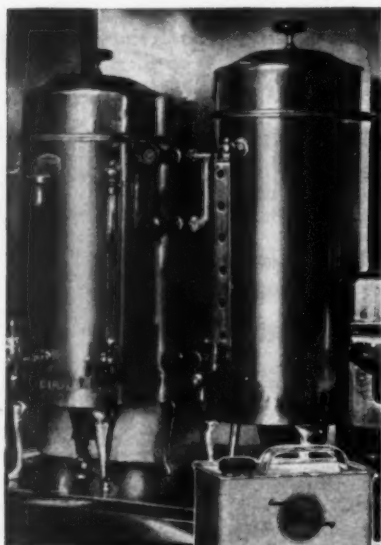
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not America, in the short-term future. But in that market—1,000,000 bbl. daily before the war—it will have to compete with Caribbean oil, which can be shipped there as cheaply, if not more cheaply, than oil can be transported from the Persian Gulf to Mediterranean ports.

Also indicated is a continued clash of competitive interests between Jersey Standard Oil on one side, and the Texas Co. and California Standard Oil, on the other, for important positions in foreign oil markets.

Jersey Standard Oil's domestic production last year was 347,700 bbl. daily, its foreign production, 349,580 bbl. daily. The Texas Co. and California Standard Oil, together exceeded Jersey Standard Oil's domestic production, but their foreign production was comparatively small.

• **Battle for Position**—If their Arabian concession lives up to expectations, the Texas Co. and California Standard Oil, together, conceivably within a few years might equal or exceed Jersey Standard Oil's foreign production, now mostly concentrated in the Caribbean. Jersey Standard Oil, however, meanwhile might expand further its own production in the Caribbean and in the Near East.

Final outcome of the world struggle for the balance of oil power, a struggle in which American oil men will fight hard to maintain their present dominant position, may depend largely upon how rapidly new foreign oil markets are developed, and how economically each interest involved can serve those markets.

Oil Boost Limited

Prospects for general crude oil price increase faded order benefiting 300,000 wells but the fight goes on.

Blanket price increases engineered through subsidies at the purchaser level will go into effect Aug. 1, for about 10% of the crude oil produced in this country, but the fight to get higher prices for the other 90% will go on ahead.

• **Overall Boost Unlikely**—Despite optimistic predictions by such officials as Gov. Robert Kerr of Oklahoma, and Sen. Carl Hatch of New Mexico, prospects for the general boost are dim.

Approval of the subsidy program for the marginal producing wells removed a lot of pressure from the drive for a blanket increase. The larger producers as well as Petroleum Administration Harold L. Ickes, have known this, and did their best to block the subsidy plan.

• **Door Left Open**—Subsidized increases ranging from 20¢ to 75¢ per bbl. for the marginal production will cover some 300,000 wells in 900 separate fields. The squeeze on this large number of producers had been one of the best talking points for the 35¢ per bbl. general increase which was recommended last year by Ickes, and had wide support within the industry.

Economic Stabilization Director Fred M. Vinson, who issued the subsidy directive, left the door open for some

Wildcatting Still Lures—Despite Crude Price

Although spokesmen for oil producers still contend that the price of crude provides little inducement for wildcatting, a number of companies whose normal operations are far removed from oil wells have been trading pieces of their bankrolls for leases and drill rigs. Savings in excess profits taxes, of course, make it possible to undertake these ventures with minimum loss.

• **Wildcat Produces**—Perhaps the outstanding example is still Northern Pump Co. (BW—Dec. 18 '43, p44) which has gone into oil production on a big scale. One of Northern's Texas wildcats came in as a producer last month.

• **Discovery Well**—Southern Pacific Lines has an interest in the oil business through ownership of some producing lands. Houston Oil Co. and

American Republics brought in a discovery well on a piece of Southern Pacific property in Hardin County, in the upper Texas Gulf Coast area, only recently. The Texas & Pacific is another railroad with Texas oil interests.

Nu-Enamel Corp., paint and varnish manufacturer whose stockholders recently authorized the company to engage in other types of business, is now an oil producer. Its first producing well came in on an 800-acre lease in Montague County, Texas. Company estimates placed the well's potential at 2,000 bbl. daily.

Mengel Co., Louisville (Ky.) wood products manufacturer, is reported considering offers for renewed oil prospecting of its timber lands in Richland and Morehouse parishes, Louisiana.

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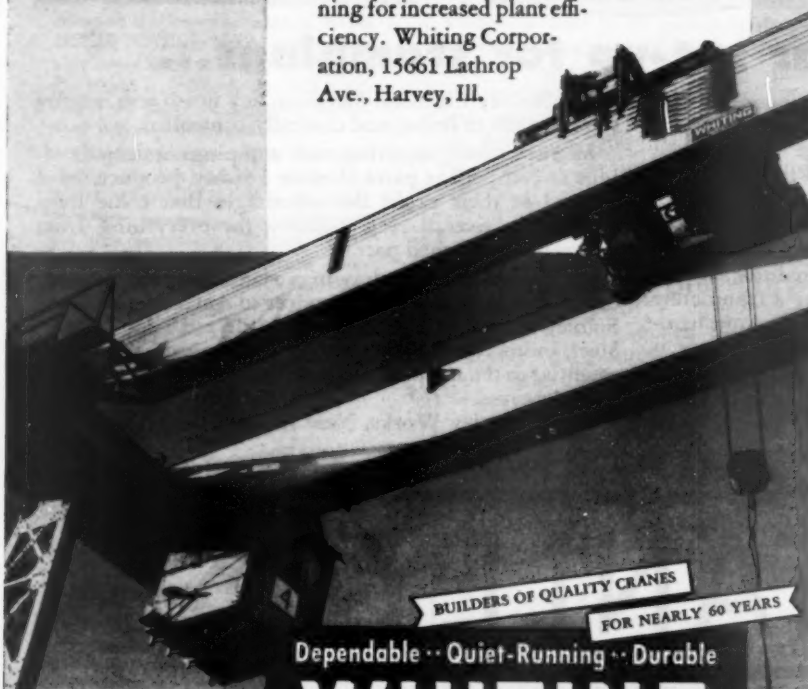
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additional relief to producers in high cost fields, but attempted to lock it at the flat boost. He authorized OPA subsidy grant increases up to 35¢ per bbl. for fields not in the marginal classification if higher-than-average cost of production could be proven.

• **War Earnings Cited**—His declaration, however, that the balance of the oil production industry is making "greatly increased earnings" because of war need appeared to put him finally on record opposed to an increase.

• **May Halt Shutting In**—While Vinson held out some hope that the subsidy would increase production, the industry seriously doubts it.

Industry representatives admit that it should sharply reduce the shutting in of stripper wells, which has been occurring at the rate of several thousand a year for the past two years, thus halting a probable reduction in output. They do not believe, though, that many of the shut-in wells will be reopened.

• **No Aid for Wildcats**—Meanwhile, earlier plans to provide a money incentive for wildcat and other exploratory drilling (BW—Feb. 19'44, p22) appear to have been abandoned. When Vinson first rejected the Ickes request for the 35¢ increase, he suggested that in addition to the marginal production subsidy some method might be devised to stimulate new discoveries.

OPA officials now say that exploratory drilling is proceeding on as high a level as possible with the limited manpower and material supply available, and it is doubtful that a financial incentive would substantially increase the search.

• **High Earners Covered**—While complete regulations covering the new subsidy will not be ready for some time, it appeared from Vinson's directive that the OPA proposal to deny the subsidy to wells owned by companies in the excess profits tax bracket has been thrown out.

Biggest subsidy—75¢ per bbl.—will be paid for wells in the so-called Pennsylvania grade crude area of New York, Pennsylvania, Ohio, and West Virginia. In other fields where wells average less than five barrels daily, the rate will be 35¢; five to seven barrels, 25¢; and seven to nine barrels, 20¢. Subsidies will be administered by Secretary of Commerce Jesse H. Jones.

The subsidy will not be paid directly to producers, but will be paid to purchasers in the various fields. They in turn will pass on the addition through a proportionately higher purchase price.

ELK HILLS JOB SPEEDED

The Standard Oil Co. of California and the Navy last week began preliminary drilling operations on eight of the

TELEVISION *and* NBC

Of all the post-war developments promised by progress in the art and science of radio, TELEVISION presents the greatest challenge and the greatest opportunity.

It is a challenge which can be met only by the co-operation of Government, broadcasters, and the radio manufacturing industry.

War interrupted development of television as a commercial service. Of necessity, men and materials were diverted to the war effort and must continue to be so diverted until victory has been achieved.

Better Service to Public

The policy of the National Broadcasting Company always has been, and will continue to be, to foster and encourage any developments in the broadcasting field which promise better service to the public.

In respect to television, it is the policy of NBC to contribute to the utmost towards the earliest possible development of television as a national service and industry.

A deep and firm foundation for the ultimate television achievement already has been laid. For the past 15 years the National Broadcasting Company has actively pioneered in the development of television service.

Television Since 1931

NBC was granted the first commercial television license issued by the FCC, and began commercial operations on the day the license was granted, using the New York Empire State Building transmitter which NBC had been operating experimentally since 1931.

Currently we are maintaining a limited schedule of weekly television broadcasting, including films, outside pick-ups of sports events, and telecasts from our recently reconditioned live talent television studio in Radio City, New York. Our program schedule will be expanded as rapidly as war conditions permit.

NBC Sound Broadcasting to be Continued

Because of its extensive coverage and accepted type of highly developed program service there is no foreseeable period when sound broadcasting will become unnecessary. Therefore, NBC will continue to maintain its sound broadcasting services at the highest peak of technical entertainment and educational excellence.

Radio now is virtually an around-the-clock service. Even when television becomes universally available, there will be times when the radio audience will be predominantly listeners rather than viewers.

New Dimension for Radio

Television is the capstone of the radio structure. It adds a new dimension to radio. So you can logically expect NBC, as America's Number One Network, to bring you the finest television programs just as you look to NBC today for the finest in sound radio.

NBC is committed to a policy of close co-operation with the Government and other members of the industry in the efforts to secure the best practical standards of operation for a commercial television broadcasting system.

In developing a basis for an eventual television network, the National Broadcasting Company will co-operate in every way with the owners and operators of the stations affiliated with NBC.

NBC Prepares for Expansion

In preparation for the expected expansion of television services in the post-war period, NBC will continue to tap new sources of program material and talent, develop new program techniques, transmit outside pick-ups of sports and other spot news events, telecast more live talent programs and continue research and development in all phases of television.

When materials become available, NBC will construct a television station in Washington, D. C. To establish the anchor points of a television system, NBC has also filed application with the FCC for construction permits for television stations in Chicago, Cleveland and Los Angeles, where NBC already maintains a programming organization and studio facilities.

A nationwide network will not spring up overnight, but must proceed as an orderly, logical development. Such a development, as we see it, will develop first by the establishment of regional networks which will gradually stretch out over wider areas, and finally become linked together.

Moderate-priced Television Sets

Despite the problems and risks which confront the radio industry, NBC believes that television service should be brought as soon as possible into every home, and that this is and should remain the task of private enterprise.

While NBC is leading the way in development of network television, the radio manufacturing industry will be busy building the finest television broadcast equipment and television receivers at moderate prices.

Through this unity of effort, you can count on NBC to meet the challenge and the opportunity television presents.

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KAUMAGRAPH

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NEW YORK OFFICE • EMPIRE STATE BUILDING, N. Y. 1

proposed 300 Elk Hills oil wells under their new contract (BW—Jun.17'44, p53).

When the program is fully under way it is estimated a new well a day will be brought in, raising the Elk Hills daily production from 15,000 bbl. to 65,000 bbl.

Naval engineers and Seabees already are at the field superintending grading, road development, and preparation of sites for the new wells. Ten drilling rigs will be on the field within three weeks, and this number shortly will be increased to 15. Standard will supervise drilling and operation of the wells.

Prices Assailed

OPA declares war on beef ceiling violators. Informations filed in Chicago charge packers with tie-in sales.

Ration holidays on pork, lamb, and veal have not satisfied the public's appetite for red meat. Beef is scarce, and the choice cuts are scarcest of all. The result has been an illegal creeping increase in prices which has forced OPA to launch a nationwide ceiling-enforcement campaign.

• **Tie-in Sales Charged**—One step in this direction last week was the filing of criminal informations, in the U. S. District Court at Chicago, charging the

three largest meat packers with coercive sales practices in violation of the Emergency Price Control Act.

The specific charge against Swift Armour, and Wilson is repeated tie-sales which leave the retailer no choice but to increase prices on choice meat to absorb his losses on the unsalable products—pigs' feet, neck bones, food, and particularly perishable sausage.

• **The Practical Effect**—When unsalable cuts or byproducts come in the front door and have to be sold out the back door to the renderer, the effect on the retailer may be the same as an overcharge of 4¢ to 5¢ a lb. on the salable part of the order. Realists know that under such circumstances the dealer boosts his price regardless of ceilings.

The packers indignantly deny any illegal actions. Swift asserts that OPA has "vindictive prejudice against large business" and quotes from its own instructions to salesmen: "(1) Under no circumstances make the sale of one product contingent on the dealer buying some other products; (2) distribute available product among consumers as equitably as possible."

Swift claims that it repeatedly checked its sales department's practices and found that these instructions were being scrupulously observed. Statements of Armour and Wilson are in similar vein.

• **Subsidy Check**—The tipoff that retail price ceilings are being ignored lies in the prices paid for beef on the hoof. There is no ceiling on critters sold for slaughter, but government subsidy pay-



FLOATING MULE

Government officials are testing a new prefabricated tugboat which Ingalls Shipbuilding Corp. bills as the world's most powerful for its size. Built in four water-tight sections, the 35-ton craft can be shipped by rail-

road or truck—then assembled with either bolts or welds. Its four gasoline engines deliver 580 hp. to twin propellers. Produced by Ingalls in collaboration with Chrysler Corp., which has built many smaller tug units for the Army (BW—Mar.27'43,p92), the novel craft is dubbed the "Sea Mule."

ments are calculated to allow the slaughterer to pay just so much—under threat of a subsidy reduction if he consistently exceeds the limit.

Comparison of the average prices per hundredweight which slaughterers in Chicago paid in June with the top prices possible under the subsidy scale shows the disparity:

	June Prices	Effective Ceiling
Choice	\$17.11	\$16.00
Good	\$16.23	\$15.25
Medium	\$14.73	\$13.00
Common	\$12.19	\$11.00

Prices paid for all grades of beef in Chicago have averaged more than the subsidy limits since the first of the year. And OPA knows that no packing house can regularly go above the top of the subsidy range, resell at ceiling prices, and still show a profit.

• **Small Packers Blamed**—The large mid-western packing houses have laid the blame for high beef prices at the door of the smaller nonprocessing slaughterers who have been buying for eastern markets. In the past, OPA has been inclined to side with the big packers.

When OPA enforcement officials first made their presence felt in Chicago more than a month ago, the small eastern buyers stepped out of the market. The price of choice beef dropped 75¢ overnight, and the big packers hastened to congratulate OPA.

But OPA noted that when producers read the signs and decided to hold cattle off the market, the big packers quickly bid the price back up, until choice beef was bringing more than \$17 a cwt.

• **Collusion Welcomed**—OPA doesn't want to tell big packers how to violate the antitrust laws, but a little collusion (such as refusal to pay more than subsidy ceilings) would be welcomed.

OPA is on the scent of serious price violations on all grades of beef, but the worst situation is on choice beef, where heavy demand and a short supply have collided head-on. When producers decide to send some of the cattle now feeding on summer pastures to market, the supply situation on the lower grades should improve and price violations should decline correspondingly.

• **Courts Are Tougher**—Enforcement officials have little hope that their scanty staff of policemen will be able to trample out the new black market in beef. But their hand has been strengthened since the big meat campaign in 1943 in two important ways:

(1) Subsidy payments are a new weapon. If a packer regularly violates ceilings, OPA can get Defense Supplies Corp. to cut off his subsidy.

(2) The courts are demonstrating an increasing sternness toward black market operators, particularly in meats.

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Unrest in Mexico

More strikes threatened as living costs soar while initial steps are taken by government to combat inflation.

MEXICO, D. F.—The employer front against striking Mexican mine workers folded like an accordion last week as one operator after another granted wage increases and other concessions.

• **Living Costs Blamed**—End of the strike, however, did not solve Mexico's crisis. Strikes are pending in the oil and textile industries. Living costs, chief cause of labor unrest, are spiraling upward (chart), and Mexico seems ripe for a wave of disturbances which may only end when the government gets a stranglehold on inflationary conditions.

The miners' strike paralyzed for three weeks an industry about 95% foreign-owned, employing more than 40,000 workers, producing \$500,000 worth of goods daily, and one of the main sources of government income.

• **Food Up 68%**—Workers in more than 100 mining enterprises had demanded a 50% increase in basic wages to counter price rises since the last wage adjustment in January, 1943. The striking union of Mexican Mine & Metallurgical Workers contends that wartime prosperity in the industry enables operators to meet the wage demands.

According to an official study, the daily cost of food for an average miner's family was slightly under 4 pesos (80¢) in February, 1944. Housing, clothing, and other necessities raise the subsistence cost to 7.7 pesos (about \$1.60) daily. Average minimum daily wage of the miners, however, was 4.68 pesos (just under \$1). Since the last wage adjustment, food costs have increased 68% (Bank of Mexico data) and the general cost of living is up more than 30% (League of Nations data). These calculations, according to the workers, justify the 50% wage increase demand.

• **Standardized Procedure**—Strike procedure in Mexico is standardized. Workers, through their union, submit claims to the Federal Conciliation & Arbitration Board, including details on (1) the economic status of workers, and (2) the employers' capacity to meet demands. The request normally sets a deadline for a strike if no solution has been reached in the meantime.

The conciliation board then begins negotiations between workers and employers.

In the miners' strike, the union request was submitted Apr. 3, and the

strike date was set for May 4. Presidential intercession postponed the deadline until June 8 when the workers walked out.

• **Test of Legality**—Once the strike is on, the board declares it legal or illegal after a count of participants: a majority walk-out constituting a legal strike. If the strike is illegal the employees participating are subject to a fine. The count in the mine strike left no doubt about mine workers' sentiments. The count at the Parral (Chihuahua) unit of American Smelting & Refining Co., for instance, showed 1,580 strikers out of a total of 1,659 employed.

• **Volume Down, Value Up**—Wartime prosperity of the mining industry is more difficult to prove than is the poverty of workers.

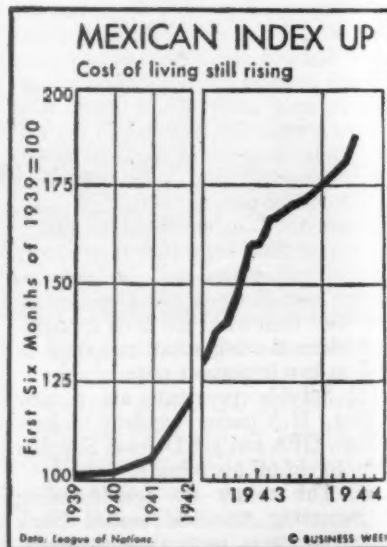
Available statistics are open to criticism, but the miners contend that while mineral and metal production in 1943 was below the volume in 1934, its value rose from 357,500,000 pesos to 721,500,000 pesos between the two years. The value of mining shares, they add, has risen from an index of 151 in January, 1943, to 182 in March, 1944 (1920 = 100).

• **High Taxes Cited**—Moreover, most operators claimed inability to meet the 50% wage increase because of high taxes and the low prices obtained for their products.

According to employers, taxes of all kinds—federal, state, and local—take a slice out of sales prices which runs as follows for some metals:

Gold	19.9%
Silver	15.5%
Lead	23.2%
Copper	22.3%
Zinc	21.6%

Operators also criticize prices paid by the U. S. for minerals, but U. S. metal



“Without fear of contradiction we state that this instrument, with its continuous balance principle, marks the greatest advance in industrial instrumentation since World War I”

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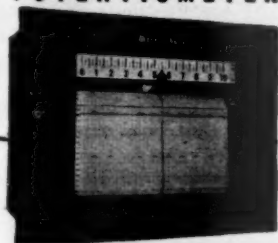
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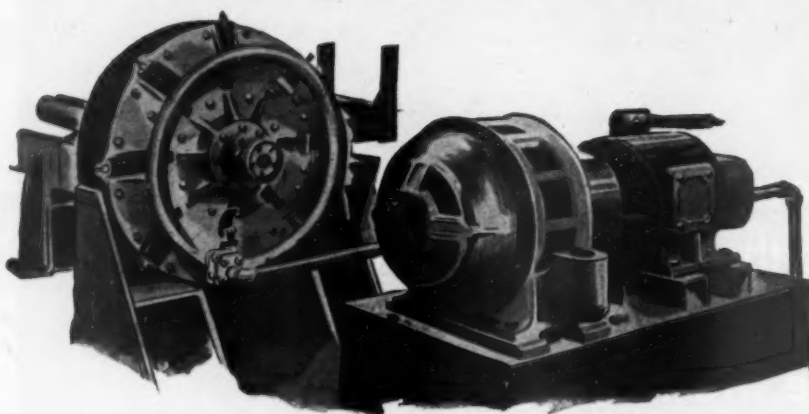


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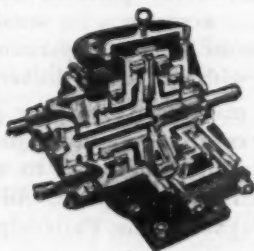


A story of a squeeze delivered by HELE-SHAW FLUID POWER

BEFORE a tube is drawn through a die, the end is "pointed." Formerly it was simply bashed in by a process of hammering, a noisy operation that necessitated constant turning of the tube. Someone thought the job could be done better hydraulically. And did it.

Now, in a "squeeze pointer", a cluster of "fingers" crushes the end of the tube to a near point in one mighty squeeze. A throw of a lever . . . and wham! Just one quick stroke, that's all. The pressure of the Hele-Shaw Fluid powered fingers is calculated so the end of the tube won't completely close—a neat example of pressure control.

Hele-Shaw Fluid Power does the job in seconds, saves time. Saves material because tube end wastage can be rigidly controlled. It's easier and quieter. Squeezing, lifting, tilting, pushing, pulling, and a variety of similar mechanical actions can often be improved by using Hele-Shaw Fluid Power. We're ready to work with you on future applications.



THE
Hele-Shaw
Fluid Power Pump



OTHER A-E-CO PRODUCTS:
TAYLOR STOKERS, MARINE DECK
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experts do not agree that the differential is significant when all factors—grade of ore, metal content, transportation costs, etc.—are considered.

• **More Strikes Likely**—The settlement arrived at in the important mining districts is strictly a compromise, and one which will last only until rising costs push the miners to action again.

In most cases wage increases ran to 10% and 12½% but included (1) retro-active payment of the increase for one month previous to the strike; (2) payment of strike costs; and (3) allocation of company funds to aid union medical and other cooperative services.

The strike wave, rather than being ended, has probably only begun. In the oil industry, presidential intercession postponed a strike of 15,000 workers, and 50,000 textile workers are preparing wage demands which may result in strikes.

• **Inflation Threatens**—Only within the past few months has the government taken initial steps to overcome the serious threat of runaway inflation. Socially conscious Mexicans are backing more drastic and farsighted steps.

Prominent among them is the leftist labor leader, Vincente Lombardo Toldano, president of the Latin-American Workers Confederation. Along lines recently pursued by American Communist-dominated unions which have been making overtures to management, Toldano recently started a series of confidential interviews with leading Mexican industrialists, reputedly seeking a satisfactory solution of labor problems.

• **Buy Food Abroad**—The government is acquiring large tonnages of food from Canada, Australia, Argentina, and the U. S., some of which is already in the market. This will probably push prices—for tortillas, frijoles, and other lower-class staples—back to cheaper levels.

In addition, Mexico recently received \$6,000,000 worth of farm implements, tractors, and parts, from the United States, and more is scheduled for delivery this year.

SERVICES YIELD TO CITY

San Francisco has settled its squabble with the Army and Navy over the refusal of the services to conform with the city building code (BW—Apr. 22'44, p43)—a dispute which was blamed in large part for the destruction by fire in April of a \$500,000 Army warehouse.

While the victory for the city is in some respects an academic one, because the bulk of military and naval construction has been completed, the peace treaty includes provisions for mutual exchange of information and for future conformity with the building code.

Piano Wire plays a different tune



INSIDE a standard size piano there are more than 200 strings. Each note on the keyboard requires one, two or three steel springs.

To help assure beauty of tone, this high-carbon steel piano wire must be exceedingly uniform in thickness and roundness, tolerances are held to .0003". It must be perfectly straight. Because it is installed and kept under high tension, it must have high tensile strength. The physical and chemical characteristics must be closely controlled in every step of manufacture to assure the greatest degree of uniformity

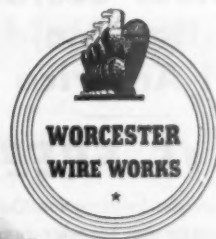
obtainable. These are some of the reasons why it took the best kind of wire made to answer the exacting demands of piano making craftsmen. The kind Worcester Wire Works has been drawing for nearly half a century.

Today, "piano wire" plays a different tune, as it adds to the ever increasing roar of destruction that spells final doom for the Axis.

Some of the wire from Worcester Wire Works that went into pianos is now used for safety clips—an important part of hand grenades; some of it is formed into springs for air-

craft precision instruments—for the spring mechanisms that eject shell magazines—for flexible shafting—for hundreds of vital war applications requiring uniform high-quality wire to provide dependable performance wherever it is used.

If you believe your product can be improved by a better round steel wire, or if you think you can improve your methods of using it, consult Worcester Wire Works' research and engineering staff. Their long experience may prove most helpful.



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Timber Reserve

U. S. Forest Service to develop Alaska area to fulfill pulp and paper industry needs. Initial tract is laid out.

The United States Forest Service is pushing development of vast timber reserves in Alaska to take care of potential pulp and paper needs. Spurred by the interest of manufacturers, the agency is laying out an initial unit that is expected to be ready by midsummer. Bids may be asked in December.

With timber stands being depleted, the pulp and paper industry is looking to Alaska for new supplies, and the forest agency is cooperating in making available the southeastern section of the territory.

● **Near Tidewater**—Estimates show that the Tongass National Forest, which occupies almost all of the Panhandle along the west side of north British Columbia, supports a virgin, commercial stand of about 78,000,000,000 b. ft., 75% hemlock and 20% Sitka spruce, both excellent pulp woods, with the remaining 5% in western red and Alaska cedar. About 75% of the commercial timber is within 2½ miles of tidewater.

Under sustained-yield management, and with the timber output used primarily for pulp manufacture, it is figured that this stand could produce annually around 800,000 tons of sulphate or sulphite pulp. Its development would represent another and logical step in the expansion of the Pacific coast pulp and paper industry from the Puget Sound area. It has already gone some 400 miles north to Ocean Falls, British Columbia. Ketchikan, in the southern part of the Tongass, is 296 miles north of Ocean Falls.

● **Awaiting End of War**—Study of potential pulp production in the Alaska Panhandle was begun by the Forest Service as a result of the interest shown by members of the industry in opportunities for postwar expansion.

While construction and operation of new mills must wait until after the war, it is believed that all preliminary arrangements can be worked out so that work can be started promptly after the cessation of hostilities.

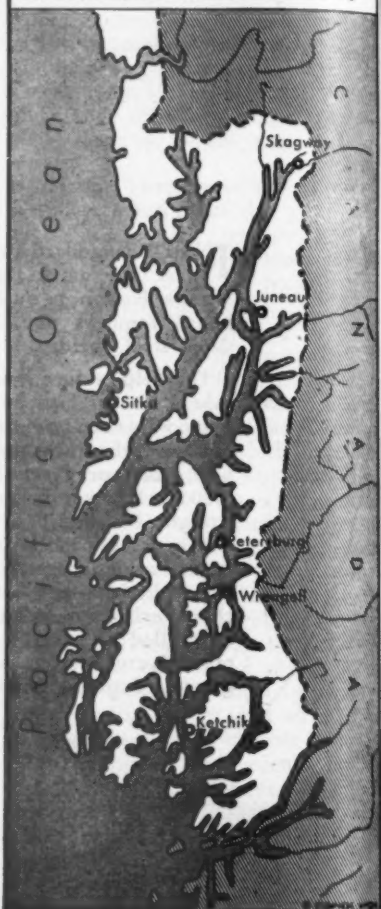
● **125 Tons a Day**—To facilitate inspection by prospective producers, the Forest Service is laying out an initial operating tract or unit in the southern part of the Tongass, near Ketchikan, and has prepared tentative terms and conditions of sale. These terms are basically those governing the sale of all national forest timber.

Timber on this initial unit is estimated to be sufficient to provide 150 tons of pulp daily for the first ten years, and 525 daily for the next forty. Preliminary surveys show that five or six such plants can be supplied with wood from the national forest.

The exact time for taking bids on the unit depends on the urgency of industrial demand and other economic factors. The basis for bids will be For-

NEW PULP SOURCE

Tongass National Forest, in Southern Alaska, may be opened for lumbering



To supplement the depleted timber stands in the Pacific Northwest, the Tongass National Forest, which occupies almost the entire southern peninsula of Alaska below Skagway, probably will be opened to lumbering as soon after the war as new mills can be built, primarily for the production of wood pulp. The Dept. of Agriculture's Forest Service has already begun laying out an initial operating tract near Ketchikan, and has prepared tentative conditions of sale.

**THE ROOF
OVER YOUR HEAD
*May Have Come
From Here***



Fruehauf Trailers **DELIVER 30,000,000 GALLONS OF ASPHALT PER YEAR**

FOR THE MANUFACTURE of roofing The Philip Carey Manufacturing Company plant at Lockland, Ohio gets liquid asphalt from the Gulf Refining plant . . . more than 100,000 gallons a day . . . better than 30,000,000 gallons a year. This big cargo previously moved by rail . . . requiring 80 tank cars . . . but the war ended that.

How to get the asphalt to its plant? Carey solved the problem by using eight Fruehauf insulated Tank-Trailers*, operating in four 2-Trailer "trains." Each of the 2-Trailer "trains" has a capacity of 6,000 gallons and each "train" averages four to five trips a day.

Delivery is steady and certain. Handling is efficient and simple. Only four men are needed to move this huge volume. And the saving

. . . in strategic materials as well as manpower . . . is obvious when the eight Trailers and their four power units are compared with the 80 tank cars that were formerly used to do the job.

Here again is an example of a *different* kind of hauling that Truck-Trailers do more effectively and economically. But whether it's a *different* or a routine kind of job, Truck-Trailers are demonstrating day after day—for thousands of users in more than 100 different kinds of business—that they can do the job better than it could be done in any other way.

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The 6,000 gallons of asphalt in these Tank-Trailers are unloaded



in 18 minutes. The asphalt, when loaded, is at a temperature of 240 to 260 degrees. The rock wool insulation is so effective that the loads lose only 7 to 10 degrees on the run. No steam coils to pre-heat the asphalt are necessary, as would normally be required. Although 60 feet long, this "train" makes a 360 degree turn within a 65-foot area in the Carey yard . . . and does it without "jockeying".

*The hauling is handled for Carey by Ohio Delivery, Inc.

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**FRUEHAUF
Trailers**
"ENGINEERED TRANSPORTATION"

INVEST IN
WAR BONDS

est Service appraisal that will take into account logging costs in Alaska as compared with the Puget Sound area.

• **Requirements**—Under the terms of the proposed sales agreement, firms entering the Alaska pulptimber field would be required to set up well-equipped plants geared in size to the sustained-yield timber supply of the unit, to carry on operations that would promote continuous employment of skilled woods and mill workers, and to foster the building of permanent and modern industrial communities.

In addition to plentiful supplies of raw material, Alaska pulp pioneers will find ample water power for mill operation, cheap log transportation along protected sea channels between woods and mill, and climatic conditions that permit logging at least nine months of the year and all-year mill operation.

• **Markets Accessible**—For shipping, the channels of the inside passage to Puget Sound are open throughout the year. Pulp and paper markets of the Orient and Australia are as accessible to Alaska as to the Pacific Northwest and British Columbia.

The pulp and paper industry is the postwar hope for the southeastern Alaska ports of Petersburg, Wrangell, Ketchikan, Juneau, and Sitka. Much of the war activity has missed these towns.

Pullman Yields

Failure to appeal order to divorce subsidiaries is seen as indication that operation of sleepers will be dropped.

From this week's announcement by President David A. Crawford that Pullman, Inc., will not appeal the adverse decision of a Philadelphia federal court (BW—May 13'44, p26) it is a fair guess that the company intends to continue in the railway equipment business and to retire as sole operator of sleeping cars on American railroads.

• **Must Give Up One**—Pullman, Inc., won just one important concession in the decision. The Dept. of Justice had asked that Pullman be compelled to dispose of its car manufacturing business. Instead, Pullman, Inc., was ordered to submit a plan within 90 days after July 7 for divesting itself of either its car-making subsidiary (Pullman-Standard Car Mfg. Co.) or its transportation subsidiary (The Pullman Co.).

Taking the case up to the Supreme Court would have gambled this option against Pullman's chances of going on as before. The manufacturing company

in 1943 earned \$4,644,000 before renegotiation, on a net depreciated value of \$31,474,000. The transportation company earned \$4,320,000 on \$66,395,000, but its average return to the parent company in ten preceding years was about 1% on the investment.

• **May Distribute Stock**—Precisely how the requisite divorce will be achieved is uncertain, since the court may accept or reject the plan the company submits. But the terms of the decree do not prohibit distributing Pullman Co. stock to Pullman, Inc., shareholders, though no officer or director may own stock in both companies.

Kuhn, Loeb & Co. is reported to be readying a company to buy Pullman's transportation business. Another report—or perhaps the same one—is that the major passenger-carrying roads intend to take over and operate the sleeping-car business through a jointly-owned concern like the Railway Express Agency.

• **Rate Possibilities**—Establishment of differential rates for coach and first-class passage in 1933 was a body blow from which the sleeper and parlor-car business recovered only under war's pressure for railroad tickets at any price. If the roads find themselves in effect owning and operating the sleeping-car pool which has been Pullman's responsibility since the Civil War, rate parity might return to American rails.

Other developments which may lure postwar customers back from the coaches include the triple-decker sleeper and the duplex roomette car. Some railroad men think very well of their possibilities for postwar luxury travelers, in full competition with the airlines.

PLAN NEW HOSPITALS

Architects, building contractors, and suppliers who specialize in hospital work are studying with interest the survey recently completed by the American Hospital Assn. which forecasts postwar hospital expansion worth \$1,193,133,985, exclusive of hospitals for war veterans.

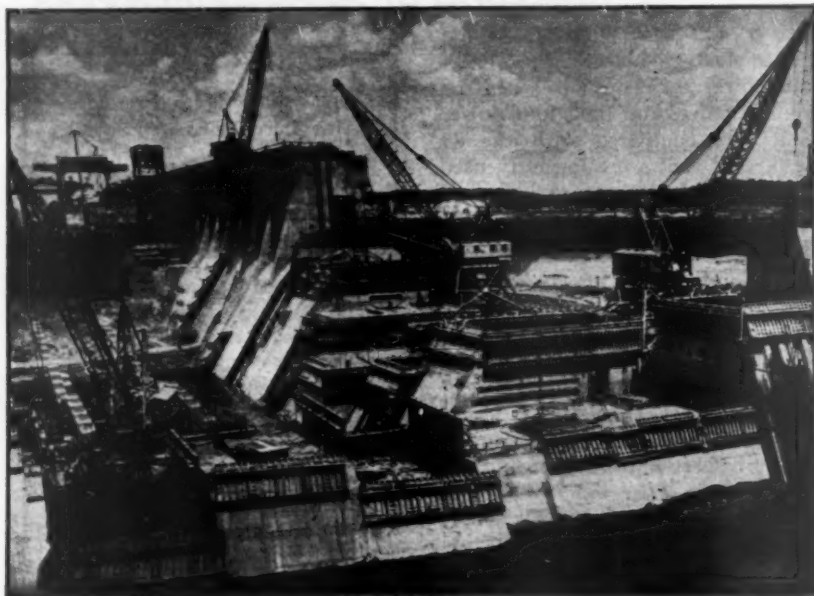
Of the 1,683 hospitals reporting, 53.3% indicated plans for some postwar building.

Discussions in Washington indicate that a strong drive will be undertaken for increased hospital facilities for veterans. Sponsors of the plan indicate that veterans' hospitals will be given postwar priorities.

PACIFIC LUMBER EYED

The war has focused attention on a potentially rich postwar source of huge quantities of tropical hardwoods on Southwest Pacific islands.

The forests, now the source of limited



TVA'S HOME STRETCH

Near Paducah, Ky., engineers are rushing work on Kentucky Dam—one of the final links in Tennessee Valley Authority's chain of projects to open the Southeast to Ohio and Mississippi river shipping. When completed late

this summer, this concrete wall and eight others on the Tennessee River will maintain channels 650 mi. upstream to headwaters at Knoxville, Tenn. Kentucky Dam's completion will leave only one TVA river project in the works—the Fontana Dam in North Carolina (BW—Jul. 8'44, p19).

quantities of lumber for war purposes, could yield many varieties of fine grained hardwoods for both industrial uses and fine furniture, according to Foreign Economic Administration experts supervising the wartime logging.

Whether the logging operations can be conducted economically in competition with existing sources of tropical hardwoods will depend, FEA experts say, upon postwar trade conditions.

Uncounted acres of forests on islands like Guadalcanal, New Georgia, Bougainville, Espiritu Santo in the New Hebrides, and New Caledonia are covered with giant trees which could yield logs 60 to 70 feet in length and three feet in diameter, without a knot.

POWER TAX CLARIFIED

Having been laid over a tax barrel by a Treasury Dept. ruling which denied continuation of a tax exemption on energy sales to the federal government for commercial or domestic use (BW—Jun. 3'44, p. 28), the electric utilities were delighted to have the Treasury's chief counsel rule that no government activity is to be considered as "commercial" for the purpose of determining whether electric energy sales in connection therewith are taxable.

Under the interpretation, energy sold to federal offices, military establishments, postoffices, airports, post exchanges, etc., is neither commercial nor domestic—best of all, not taxable.

Barracks away from posts (Waves in Washington's Potomac Park), use electric energy for domestic purposes and the companies thus must pay the 3.3% tax thereon. Energy used at barracks in military establishments is not taxable unless separately metered at the barracks. Federally owned and operated housing projects which buy current for their tenants buy it for domestic use, thus taxes on it must be paid.

MORE ANGORA WOOL

Half as much Angora hair now is being produced domestically as was imported before this war began. The total is about 50,000 lb. a year from rabbits raised mostly in Colorado and eastern states by farm boys and disabled veterans who market their clip through two cooperatives, the American Angora Rabbit Breeders of Palmer Lake, Colo., and Federation of American Angora Breeders at East Haven, Conn.

Best quality sells for \$10 a lb. but the co-ops warn prospective rabbit raisers that prices are likely to fall when imports are again available.

Rabbits grow 5 in. to 8 in. of hair a year and are sheared four times. A mature animal produces 12 oz. a year.

THE WINNER WITH SPEEDI-DRI



---She's Not So Dumb

FIRST PRIZE for speeding production goes to **SPEEDI-DRI**—the quick-acting oil- and grease-absorbent that puts a sure, slip-proof footing under employees who have to work around machines that drip oil and grease onto the floor. Sure-footed workers move faster when the danger of slipping is eliminated by **SPEEDI-DRI**. Application of this light-reflecting, granular material will not only absorb the daily oil deposits but will soon draw the old accumulations of oil and grease from the floors. **SPEEDI-DRI** also retards fire, saves shoes from oil-rot, helps prevent industrial skin-diseases, reduces porter-labor, improves morale, brightens the plant, cuts insurance costs. Write for literature and **FREE SAMPLE**.

Ask your supplier about the sensational new product—**FLIX**.

SUPPLIERS: East—Refiners Lubricating Co., New York 1, New York.

Midwest & South—Waverly Petroleum Products Co., Philadelphia 6, Pa.

West Coast—Waverly Petroleum Products Co., Russ Bldg., San Francisco 4, Calif.



OPA Eyes Wine

Price agency summons grape growers to discuss lower ceilings in advance of talks on cuts for bottled goods.

California grape growers were summoned to Washington this week to hear OPA's proposals to lower price ceilings.

Talk before the session was that raisin varieties might be slashed as much as 33%, and that wine varieties would be cut in proportion. Growers who had a peak crop last year and got fancy prices from wineries and speculators, were expected to protest, though estimates for the 1944 harvest are almost as high as for last year.

• **Wine Prices Scanned**—OPA had delayed tackling the runaway prices on grapes until it was nearer a solution of the problem of regulating wine prices.

Next week OPA hopes to reach an agreement with the wine industry advisory committee in San Francisco whereby bottled goods will cost the consumer less.

The 1942 OPA order limiting wine prices was based on grapes at \$28.20 a ton, but wineries paid \$30.30. The 1943 order was based on \$30.30 grapes, but wineries paid \$79. This spring, preseason bids were in the \$125 to \$150 range, and actually some grapes had sold that high last autumn.

• **Brands Upgraded**—To meet the high cost of grapes, some wineries did a lot of things that OPA didn't like.

They upgraded ordinary wine and put more of it into old brands with handsome labels and attractive vintages. Some wineries used the "special application" loophole to ask for higher prices based on complicated special conditions. Unless OPA refused these requests within 60 days, prices to retailers automatically went up.

General result was that wine prices crept steadily higher and the public, which isn't yet smart about wines, paid heavily.

The consumer didn't complain too loudly because wine was sometimes scarce. Sales that had been 96,000,000 gal. in 1942 against inventories of 163,000,000 gal. (which is normal), fell to 73,000,000 gal. in 1943 against inventories of only 123,000,000 gal. The lowered inventories caused wineries to restrict their release of wine for sale.

• **Services Eye Crop**—The booming market for wines meant profits for grape growers. They had, however, lost all their raisin varieties (of which 50% normally go into wine) to the War Food Administration which set them aside

for drying as food for the armed forces. This year, although growers say there will be a 100,000-ton raisin carryover, WFA may again take all the crop.

Growers are urging the government to take less of the crop (BW—Jul.1'44, p51) and let them sell the balance to wineries at the higher prices. There also is the chance that if the drying season is less than perfect, more spoiled raisin varieties then will be available for fermentation.

• **Bulk Sales Avoided**—At recent high prices of grapes, wineries claim they can't make a profit on bulk wine.

Instead, some of them have made deals with bottlers who charged less than usual and made up the reduction by the 25% markup they were allowed on bottled wines. Dessert wines in bulk had 55¢ a gal. ceilings, while costs ran as much as \$1.15.

• **Speculators Wary**—Speculators who ran the price of grapes up because they wanted fruit alcohol to use in diluting whisky, may be less active in this year's market because of the whisky holiday granted to grain distillers (BW—Jul.8'44, p16).

Imports of wines, meanwhile, are steadily rising. None came in during 1942, but 1943 reached the prewar norm, and 1944 will top it. Portugal, Spain, and South America replaced France and Italy as sources.

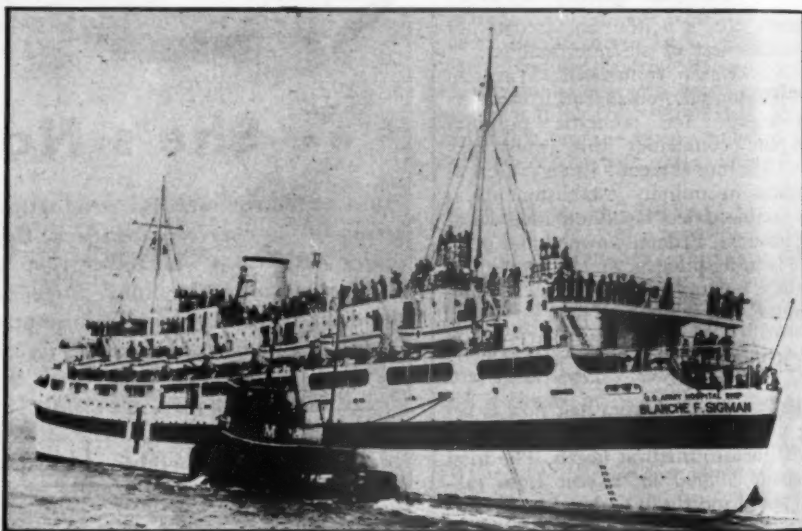
South Lacks Ice

Prolonged heat waves and increased wartime demands force rationing and priorities in several large cities.

Prolonged heat waves and greatly increased wartime demand have overtaxed the South's ice production facilities, and supplies in many cities have been exhausted, forcing emergency rationing and priority orders for householders and business establishments.

• **No New Machinery**—Little relief is in sight. Ice manufacturers throughout the area report that their operations are at capacity levels, and that no increase is possible because additional machinery is not available, and even if it were, extra manpower for increased production is lacking.

Most manufacturers were prepared for normal calls for ice, but summer heat came early, with above-normal temperatures. Heavy movement of troops and perishable foods; the requirements of industrial plants working two and three shifts where formerly they worked only one; the needs of military installations; the inability of individuals to replace mechanical refrigeration equipment



LIBERTY MERCY SHIP

Gleaming white paint and extensive modifications make the Blanche F. Sigman the most unusual Liberty Ship afloat. Transferred from cargo runs on which it served as the Stanford White, this vessel is the first of six Liberties to be converted into modern Army hospital ships. Five decks

and new bilge keel (to reduce rolling) were added by Todd shipyards in changing the ship to accommodate 600 patients. This first major conversion of the cargo carriers comes as the Liberty shipbuilding program approaches its schedule of 2,625 ships. Contracts for them extend well into 1945, with only three more to be launched on the West Coast.



X Gun in a jam . . .

WHEN stoppage occurs in the famous "fifty" machine guns used on our war planes, it's quickly detected and cleared by a "thinking machine." This Kidde Pneumatic Machine Gun Charger, operated by compressed gas, corrects gun-charging troubles or stoppages, gets gun firing again—all within one-half second!



Trigger-fast fire-killer! Take aim, pull trigger — and blanket fire! Carbon dioxide from Kidde extinguisher expands 450 times, smothers fire in cloud of gas.

Fire block for open door! At industrial plants, Kidde Screening Nozzles throw fire-proof curtain of carbon dioxide across openings to block spread of fire.



Dug-out surgery! Deep in the jungle, these combat surgeons work skillfully to save a life, as special Kidde shatter-proof cylinder delivers the anesthesia.

Gases-under-pressure, harnessed by Walter Kidde & Company, are serving our fighting men in many ingenious ways. After the war they'll serve you. Look for them!



WALTER KIDDE & COMPANY, INC., NEW YORK 6, N. Y.

Flame-Proofed FELT FIGHTS ON MANY A FRONT!

Felt, insulator par excellence for aircraft in this global war, was called on for EXTRA service.

THE PROBLEM

Could this material be made flame-proof for any airplane application?

THE TEST

Felts chemically treated by American Felt engineers were exposed to the direct flame of a bunsen burner.

THE RESULT

No combustion or after glow resulted after removal—even when pure oxygen had been directed onto the tested area!

Any standard, specified Felt, as S.A.E. for example, can be delivered flame-proofed. In industrial and automotive, as well as aviation installations where fire resistance is a factor — look to Felt to serve as faithfully as in its many other protective functions. Write for Samples, engineering data and

"The Story of Felt."

**American Felt
Company**
TRADE MARK

General Offices: GLENVILLE, CONN.

New York; Boston; Chicago; Detroit; Philadelphia;
Cleveland; Los Angeles; San Francisco; Dallas;
St. Louis; Seattle

PRODUCERS OF FINEST QUALITY FELT PARTS
FOR OIL RETAINERS, WICKS, GREASE RETAINERS,
DUST EXCLUDERS, GASKETS, PACKING; VIBRA-
TION ISOLATING FELTS AND INSULATING FELTS

when units wear out, and the fact that practically all movement of vegetables and fruits by motor truck has been suspended—all these helped to push demand beyond available capacity.

• **Manpower Lacking**—Answering the need of New Orleans ice plants for workers, the War Manpower Commission ordered the highest referral priority for plants in that area, and assigned recruiters to search for workers.

Similar action was taken in Mississippi, where 2,330 workers were needed in the Biloxi-Gulfport area, with only 1,700 available. In the Jackson County (Miss.) district (Ingalls shipyards), 5,739 workers were needed but only 3,400 were available.

• **Supply Rationed**—The New Orleans ice shortage approximated 100 tons daily, and state health officials said the loss of perishable food had assumed serious proportions.

A rationing system for ice was set up, giving priorities, in order, to hospitals and institutions; ill persons certified by physicians; milk producers and distributors; households without mechanical refrigerators; perishable food distributors and producers; retail food handlers; and beverage bars and soft drink stands.

• **Bar New Customers**—In Jacksonville, Fla., city health officials issued a directive to stop interference by ice-hungry citizens with ice wagons and trucks en route to regular customers. No new customers were being serviced.

Little Rock dealers limited sales to 25 lb. a day. Rationing similar in form was in effect in Tampa and Tallahassee, Fla. In Birmingham, no new customers were being accepted and dealers were rationing ice, through delivery men, on a basis of needs.

To aid in the shortage, refrigerator car icing in the southern area was reduced to a mere safety minimum by federal order.

RAIL RATE PROBE LOOMS

When Gov. Ellis Arnall of Georgia took his railroad rate adjustment case to the Supreme Court recently (BW—Jun. 24'44,p41), he sent a copy of the petition to Attorney General Francis Biddle with the suggestion that an independent investigation would be in order.

Last week three representatives of the Dept. of Justice Antitrust Division turned up in Atlanta to confer with Arnall and with the state's attorney general and public service commission. Data obtained on the alleged freight monopoly will be turned over to Biddle for study.

Arnall hopes, through Supreme Court action, to end the present territorial system of rate making and to force a readjustment of rates.

Dream Dissolved

Survey for home builders bursts the bubble of revolutionary change in design and equipment for postwar homes.

Any resemblance between the home built during the first few years after the war and the home built in 1941 will be more than coincidental. For the dream house of tomorrow will embody few of the innovations pictured in gay advertisements under the caption "You, too, can enjoy the luxuries of modern living."

• **Swelling the Chorus**—Building materials and construction people, alarmed at the postwar visions of convenience, comfort, and design conjured up for the home-buying public by enthusiastic illustrators and phrase molders, have been hammering at that theme for a year or more (BW—Sep.11'43,p17).

Now the National Assn. of Home Builders has added its voice to the chorus that debunks electric-eye controls for doors, back-yard landing plots for helicopters, electronic cooking devices, summer air conditioning, and plastic plumbing as the indispensables of the postwar home.

• **Sobering Note**—And the N.A.H.B. adds a sobering note to the chorus with the results of a survey it sponsored among the manufacturers of building materials and home appliances as to the peacetime gadgets most commonly predicted. These manufacturers believe that postwar innovations available to the home builder will be limited to:

(1) Wider use of such materials as light metals, but only in houses above the middle range of total costs.

(2) A new type of coal-burning furnace.

(3) Some improved kitchen ranges (but not right away).

(4) Folding doors to be used as movable partitions, but not in houses of lowest price.

(5) Normal evolutionary improvement in household equipment and in use of such materials as plastics and plywoods.

"And that," observes the researcher, "is all."

• **Less Than They Want**—The finality of his words is impressive when ranged alongside the aspirations of prospective home builders as they were developed in a spot check of 517 families in eleven cities. These families, with average annual incomes of \$3,027, expect to pay, on the average, \$52 a month under Federal Housing Administration financing for the homes they build after the war.

In these homes, 72% expect complete air conditioning; 81% look for

IT'S ALWAYS *Wiser* TO *Wire Ahead*

CLASS OF SERVICE
This is a full-rate Telegram or Cablegram unless its character is indicated by a suitable symbol above or preceding the address.

SYMBOLS
DA - Day Letter
NL - Night Letter
LC - Deferred Cable
MT - Cable Night Letter
RM - Radiogram

WESTERN UNION (01)
A. N. WILLIAMS
PRESIDENT

The filing time shown in the date line on telegrams and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination.

NB 35 29-WUX NEWYORK NY 4 442P

RE : POSTWAR BUILDING
TO : ARCHITECTS-ENGINEERS-INDUSTRIAL EXECUTIVES

ELECTRICAL WIRING IN YOUR POSTWAR PLANS
DESERVES A FULL MARGIN OF SAFETY
FOR EXPANSION - - INSURANCE AGAINST
BREAKDOWNS AND EARLY OBSOLESCENCE.

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE.

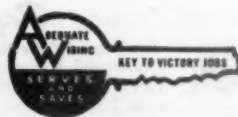
PLANNING POSTWAR HOMES? A new factory? A brighter, more bustling town? You'll want to take every advantage of the wonderful electrical devices of tomorrow.

So—Wire ahead! Make sure that your electrical system can handle the greatly increased

load that it will surely be asked to carry.

While you're in the advanced planning stage consult with your engineer, electrical contractor and utility power engineer. Unwired planning will cost you a lot more than planned wiring.

HELP BRING VICTORY SOONER . . . BUY MORE WAR BONDS



ANACONDA WIRE & CABLE COMPANY

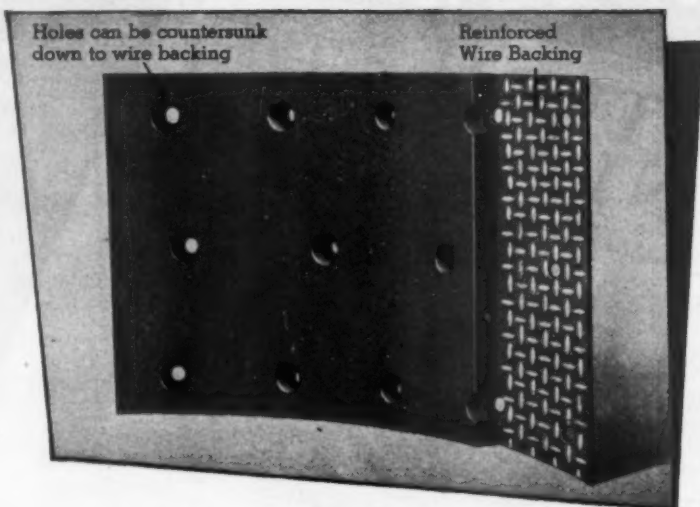
25 Broadway, New York 4... Sales Offices Principal Cities

Electrical Wires and Cables of Copper are the Life Lines of our Nation

**WAGNER
PRODUCTS
for
industry**

Holes can be countersunk
down to wire backing

Reinforced
Wire Backing



Wagner

replacement

BRAKE LINING

will not score brake wheels

EVERY plant maintenance engineer will profit by learning more about the advantages of Wagner Replacement Brake Lining for all industrial brakes.

These superior quality molded wire-backed blocks have these features:

1. Non-abrasive — will not score brake wheels.
2. Suitable for use with any type of brake wheel.
3. Preformed to size and molded to wheel diameter.
4. Wire-backed to permit deep seating of lining bolts or rivets.
5. Molded blocks save installation

time because they are easily applied.

6. Available from Wagner branch stock.

7. They reduce inventory by eliminating excessive stock of roll-type lining which is generally purchased in long lengths in order to obtain the best price.

In addition to Brake Linings, Wagner products for industry include Hydraulic Braking Systems, Electric Motors, and Transformers. For details, consult the nearest of Wagner's 29 branch offices located in principal cities and manned by trained engineers.

Request Bulletins



You should have Bulletins BU-145 (Brake Lining), IU-20 (Industrial Hydraulic Brakes), MU-182 (Polyphase Motors), MU-183 (Single-Phase Motors), TU-180 (Distribution Transformers), and TU-181 (Power Transformers).



Wagner Electric Corporation

ESTABLISHED 1891

6460 Plymouth Avenue, St. Louis 14, Mo., U. S. A.

ELECTRICAL AND AUTOMOTIVE PRODUCTS

WONDERFUL FUTURE

The building industry may be striving to keep visions of postwar dream houses within bounds, but descriptions of Wellsian gadgets continue to make good advertising copy.

Witness a series of ads (one a week for 26 weeks being run by Sterchi Bros., Inc., of Knoxville, Tenn., operators of 31 furniture stores in the South. The first ad sets the pace by explaining that out of the necessity of war has come a great surge of inventive genius which is going to express itself in better living "in 194X—whenever the war ends."

The most exciting gadgets described in the ads range from use of "radio inducto therm" for cooking your roast (the therm may be portable, heating your water and ironing your clothes in tomorrow's world), to a wonderful automobile radio, which will make it unnecessary for you to drive aimlessly up and down trying to get the headlights to shine on a house number when you are trying to locate a friend's house on a dark rainy night.

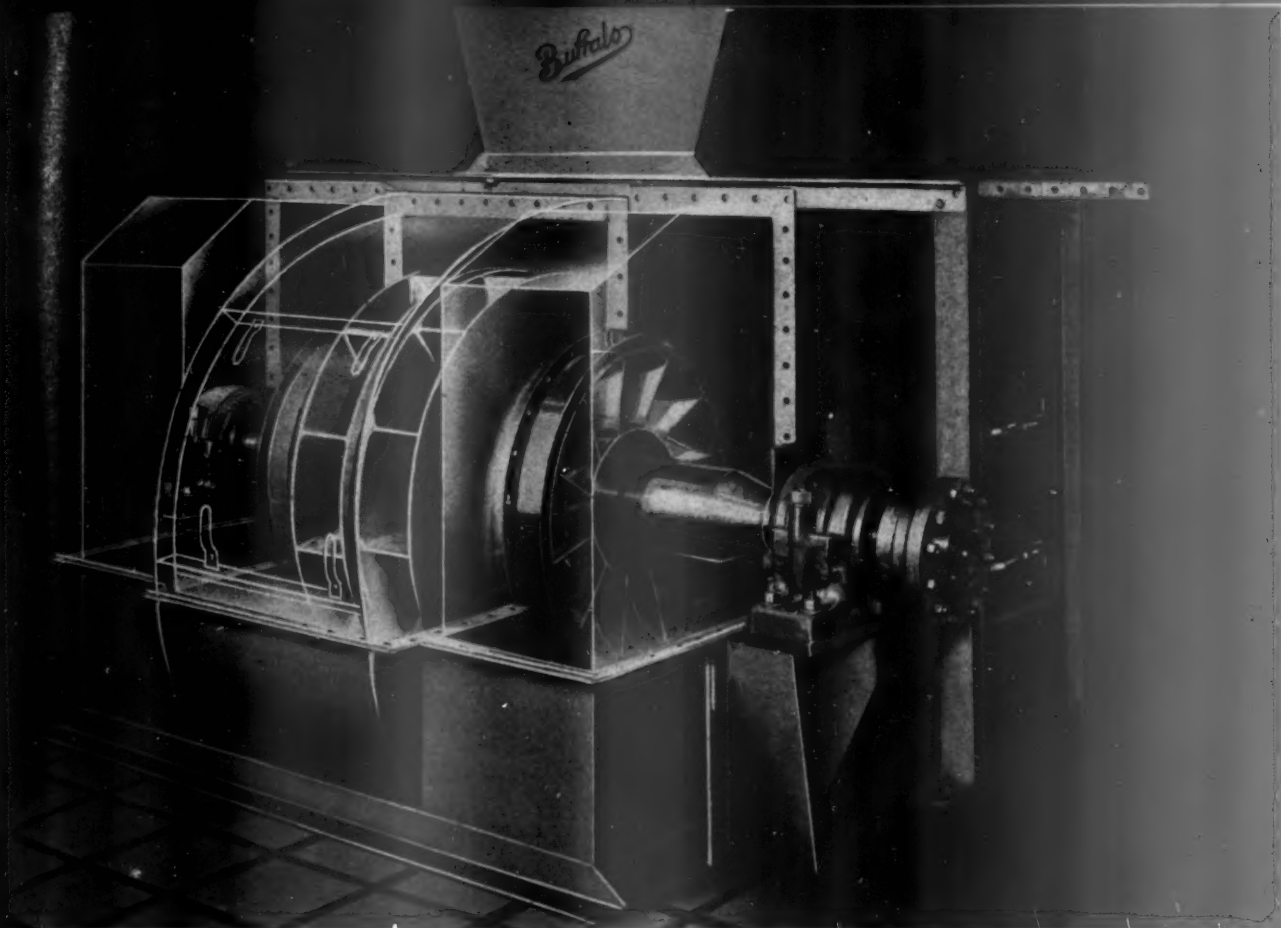
According to the ad, your radio will be tuned in to the frequency of a beam from the house to which you are going. As you come to it, out of your speaker will come the words, "The Jones house is on the left," . . . and there you are.

electronic controls to simplify house-keeping and for extensive use of plastics in plumbing fixtures and wall surfaces; 60% hope to get movable partitions between rooms; 54% want outside walls that can be opened upon the garden or terrace—and all of these things within six months to a year after the war.

• **Public Oversold**—Thus it is apparent that the home-buying public—at least that portion of it covered by the check of 517 families, admittedly a small sample—has been oversold.

The association does not underestimate the scope of the job ahead. The survey indicated that 54% of the families would give up their plans to build or buy if they couldn't have complete air conditioning; 62% if they couldn't have electronic gadgets; 53% if plastic plumbing didn't materialize; and more than 25% if they were denied movable partitions and outside walls.

• **Refinements Promised**—To counteract the apparent apathy toward new homes of conventional design, materials, and equipment, the builders are promising



This Buffalo Pressure Blower for use in one of the new process plants is designed for 50,000 cubic feet per minute capacity raised to three pounds in pressure in a single stage. Designed specially for this job by Buffalo Engineers, note rugged construction and accessibility of all parts.

"KNOW-HOW" says "WHEN"



THIS BOOK, "Fan Engineering" deals with the theory and practice of handling air and gases mechanically. It is the air engineers reference on almost every industrial project built in U.S.A. in the past 30 years. Thousands of copies of this book are serving the contractors and operators of American and Allied armament and munitions plants.

Beautifully printed, indexed, bound in limp black fabricoid, you can buy these 240 pages of useful information for just \$4.00 post paid in U. S. A.

Sometimes the layman cannot understand why the fan engineer insists on knowing as much as possible about the system on which a fan is to be installed. After all...if the fan will deliver 10,000 cfm against 1-1/2 inch static, what more information is needed?

That's where the KNOW-HOW comes in. The air engineer who really "knows his fans" can select one which will give ideal performance on the job... and the next day, on requirements which might look similar... he will select an entirely different fan.

The KNOW-HOW says WHEN— when to pick a disk fan, when to use a non-overloading fan, when to use inlet vanes, or water-cooled bearings, or scroll liners. When to use

two fans instead of one... when to revise the piping system to get most air for your money.

This KNOW-HOW cannot be picked up quickly...or passed on easily. It comes with experience...the kind that Buffalo engineers get from years spent in the engineering department and on the test floor.

Buffalo Sales Representatives, located in all principal cities, are graduates of the Buffalo "School of Experience." Their advice on the selection of air moving or conditioning equipment is particularly desirable, because the Buffalo line is so complete that they are able to make an unbiased recommendation for the most efficient equipment for your specific needs. Call on them for confirmation.



BUFFALO FORGE COMPANY

BUFFALO
New York

BUFFALO PUMPS, INC. • THE GEO. L. SQUIER MFG. CO.
CANADIAN BLOWER & FORGE CO. LTD. • CANADA PUMPS, LTD.

Buy
WAR
BONDS

DO YOUR POST-WAR PLANS CALL FOR PRECISION PARTS?



THIS **ADECO** GUIDE-BOOK CAN HELP YOU . . .
SEND FOR IT TODAY

Get this new illustrated booklet and see how the Adeco organization and facilities can meet your exact specifications for close-tolerance production of parts and assemblies on a contract basis. This helpful information is yours for the asking.



AIRCRAFT & DIESEL EQUIPMENT CORP.
4401 N. RAVENSWOOD AVE.
CHICAGO 40, ILLINOIS
Your Partners in Precision

When you specify this

OSTER MOTOR

you are assured of dependable performance in 4 different ways

1. Sound, conservative engineering
2. Established precision standards
3. Trained production staff
4. 15-year performance record

When you specify Oster Fractional Horsepower Motors, you know that you are dealing with a seasoned, dependable source — experienced for 15 years in building motors.

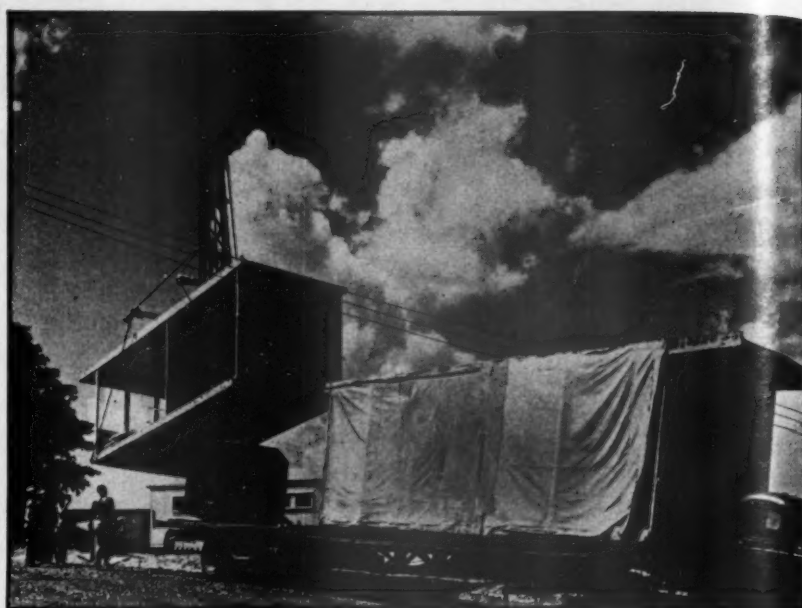
Illustrated below is Type C-2B-1A, 1/100 H.P. model developed for aircraft use and adaptable to blower applications. It's equipped with ball-bearings and built in an aluminum die-cast housing; 6, 12, 24, or 115 volts D.C., 115 volts A.C.

Let us help you fit this or other Oster motors to your requirements. Write for details.

M-10C



John Oster Mfg. Co., of Illinois
Dept. Q-16 Genoa, Illinois



CRANE SAVES MUSCLES

Trucked hundreds of miles from factory to war housing sites, prefabricated houses designed by Tennessee Valley Authority (BW—May 6'44, p40) are quickly set on foundation piles by

mobile crane. Used mainly on large projects, this method saves time and muscles formerly required to move sections into place on rollers. With plumbing, wiring, and decorations already installed, the units are joined to form one- and two-bedroom homes.

homes of greater value and more spacious living area embodying improvements in building methods and refinements in existing materials.

They are comforted by the thought that, whatever may be the aspirations of the home-buying public expressed in sampling surveys, postwar needs in terms of dwelling units are estimated to range from 400,000 a year to 1,900,000 a year for ten years (BW—Mar. 25'44, p15). This should keep them busy until the materials men are ready to clothe the dream house with more realism.

BREWING CORP. SPREADS

Cleveland's fast-growing Brewing Corp. of America, whose aggressive merchandising lifted its sales from 20th to 15th place in last year's roster of producers (BW—Apr. 15'44, p106), increased its potential volume by another one-fourth last week by acquiring two other Cleveland breweries, the Tip Top and Forest City.

Thus the company backs its conviction that it has won a larger postwar market for its Carling's Red Cap ale. It has held the attention of the industry by its growing sales.

James A. Bohannon, Brewing Corp. president, announced the formation of a new wholly owned subsidiary, Car-

ling's Inc., which will operate the two new properties as well as any future acquisitions. While the purchase price was not disclosed, former officials of the Tip Top Brewing Co. and Forest City Brewing Co. estimated their combined value at \$1,500,000.

The new facilities will give Brewing Corp. a yearly capacity of 1,000,000 bbl., five times the initial volume ten years ago.

NHA GETS SHIPYARD HOUSES

When the National Housing Agency took control this month of defense housing projects built by the Maritime Commission for shipyard workers in eight communities, there was a cash dividend in it for the cities.

The Maritime Commission was forbidden by law to make payments in lieu of taxes to the communities. But NHA is not so bound. Its annual payments will aggregate some \$700,000 for the \$40,000,000 of dwellings housing 18,851 persons.

NHA expects to effect economies in management because of the proximity of projects of its own. The projects are in Richmond and Oakland, Calif.; Mobile, Ala.; Beaumont, Tex.; Pascagoula, Miss.; South Portland, Me.; Tampa and Panama City, Fla.

WAR BUSINESS

CHECKLIST

A digest of new federal regulations affecting priorities, price control, and transportation.

Increased Civilian Supply

WPB has authorized formally the production of 800,000 civilian-type telephone sets for delivery in the fall; each telephone company may order up to 1% of the telephones that it had in service on Dec. 31, 1943, if there is an immediate subscriber for every telephone ordered (Utilities Order U-8, revised). . . . Limited production of electric water heaters for civilian use is authorized, new quotas are established for nonelectric water heaters, and metal jackets for heaters are again permitted as a result of an amendment to WPB Order L-185. . . . About 750,000 yd. of nylon parachute cloth, now in the hands of weavers, have been released by WPB because the cloth is unsuitable for military use; it will be distributed to civilians through normal channels. . . . Manufacturers who wish to increase their output of infants' shoes are promised favorable consideration if they will apply to WPB's Leather & Shoe Division. . . . By amending Order M-63, all controls are lifted from imports of cod oil, metallic mercury and mercury-bearing ores and concentrates, bananas, and dehydrated vegetables except onions and edible olive oil. . . . Manufacturers of can openers may use twice as much iron and steel as they have been using recently for household can openers, and two and one-third times the previous rate for institutional can openers, while zinc may be used for all types, WPB has ruled in Supplementary Order L-30-d, amended. . . . WPB Order M-9-c has been amended to permit manufacturers to use copper and copper-base alloys in civilian ammunition without filing appeals.

Relaxation of Priorities

War Food Order 33, originally Order M-193, establishing standards for recovering glycerin from fats and oils split into fatty acids or made into soap has been revoked in view of the improved glycerin situation. . . . Restrictions on distributors' inventories of aluminum powder and paint have been relaxed to permit sales after June 30 without preference ratings or end-use limitations; manufacturers may apply to the Aluminum & Magnesium Division of WPB if they want these materials for uses other than those allowed under Supplementary Order M-1-g. . . . Set-aside requirements for fish oil were removed by revocation of WFO 60. . . . Alox 600, an oxidized petrolatum compound used as a rust inhibitor, has been freed from allocation by WPB Order M-340, as amended. . . . Under WPB Order M-138, as amended, all restrictions on the use of istle except F.A.Q. (fair average quality), palma, and pita have



PHOTO - CLEVELAND GRAPHITE BRONZE CO.

Efficient and unrestricted

movement of concentrated loads to all plant

areas demands modern handling

equipment of extreme maneuverability, power and speed

. . . equipment that can go anywhere,

such as

TOWMOTOR



THE 24-HOUR ONE-MAN-GANG

TOWMOTOR CORPORATION • 1221 E. 152ND STREET, CLEVELAND 10, OHIO

STRAIGHT-GAS POWERED INDUSTRIAL TRUCKS EXCLUSIVELY—SINCE 1919

THIS ANSWER TO TODAY'S PROBLEMS MAY PROVE *A Life-Saver Tomorrow*



Many an overworked factory has solved universally troublesome problems with Loudon Overhead Handling. These Loudon Systems took handling out of the hands of men and provided the equivalent of a big new manpower reserve. These Loudon Systems took handling off the floor and made room for more production equipment. These Loudon Systems simplified assembly and process operations... let men and machines spend more time at work... and in doing all these things increased production tremendously. Tomorrow when the race to reconvert begins, these self-same Loudon Systems will provide the precise flexibility and adaptability to place their possessors ahead in the race... and will even help in the big job of plant rearrangement. How much Loudon Systems can help you, today and tomorrow, is told in the free Loudon book "Economical Materials Handling." A copy will be sent at your request. The Loudon Machinery Company... 5228 West Superior Avenue, Fairfield, Iowa.

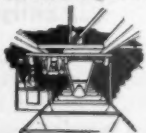
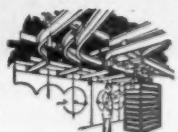
What Loudon Does

Loudon Overhead Handling moves the transportation of materials, parts and assemblies out of the way of men and equipment, to the unused factory ceiling, saves floor areas for production. It can reach machines, bins, tables, ovens, etc., otherwise inaccessible... can travel from machine to machine, department to department, building to building... from the receiving door through the entire plant to the shipping platform. It can consist of simple, manually-operated hoists, cranes, and carriers; floor-operated power units; cab-operated types; or the amazing new dial-operated Loudon Automatic Dispatch System. A wide range of track sizes permits proper engineering of each Loudon installation to load requirements. Many of America's most modern factories are completely Loudon equipped and the full list of Loudon users reads like a roll call of the world's leading industrialists.



FREE Materials Handling Manual

64 pages of facts and photographs, scores of installations. How to handle all kinds of materials, in all kinds of plants. A wealth of man-saving, time-saving, space-saving ideas and methods. Write for free copy today.



LOUDEN OVERHEAD MATERIAL HANDLING SYSTEMS

Untangle Men, Machines, Manufacturing and Material Handling

been removed. . . . Wooden shipping containers may be used for packing and shipping certain fruits and vegetables under WPB Order L-232-a, as amended, while restrictions on the use of these containers by commercial growers of California and Arizona oranges and grapefruit are eased. . . . WPB Order L-151, as amended, establishes a procedure to allow manufacture of domestic watt-hour meters. . . . By amending order M-150, WPB has reduced the number of prohibited uses of aromatic petrolatum solvents (Class A) from 92 items to 38, and has added three new permitted uses for Class B solvents.

Cotton Textiles

In line with the cotton textile provisions of the new Stabilization Extension Act of 1944 (BW-Jul. 1 '44, p. 15), OPA has authorized price increases for most combed and carded cotton yarns, major types of sheets and pillowcases, denims, certain chambrays, most combed yarn fabrics, and knit cotton heavy-weight underwear covered by MPR 221. Manufacturers' prices for the basic construction of denim (2.20 yd. a lb.) are increased 1¢ a yd., from 20½¢ to 21½¢. Other specific increases are to be announced. Manufacturers of these goods and of Class "A" gray print cloths may make open contracts, effective June 30, for sales at the new prices to be established. At the mill level, estimates place these increases at between \$25,000,000 and \$50,000,000. (Amendment 20, Revised Price Schedule 35, for denim.)

Percentages of cotton textile producers' output that must be set aside during the third quarter of 1944 for export orders are fixed by WPB in amendments to Order M-317. Under a new provision, preference rating set by the Foreign Economic Administration for export licenses and release certificates are automatically canceled if they are not applied within six months from the date of issue. This does not apply to ratings on orders accepted before Aug. 1, 1944, for delivery before Oct. 1, 1944.

Small Business

At the request of the War Dept., the Dept. of Commerce is preparing, through the Bureau of Foreign & Domestic Commerce, a series of books on establishing and operating small businesses and shops in a number of fields. The following fields are to be included: metal working shops, sawmills, painting contractors, building contractors, electrical appliance stores, grocery stores, restaurants, dry cleaning establishments, shoe repair shops, filling stations, laundries, auto repair shops, real estate and insurance, heating and plumbing, apparel stores, beauty parlors, variety and general merchandise stores, bakery stores, drug stores.

Passenger Automobiles

Rationing requirements for passenger automobiles have been tightened by OPA to put all 1942 hard-top cars with factory list prices ranging from \$1,500 to \$2,500, and 1942 convertible soft-top cars listed



Who holds it up when he lets go?

POSTWAR planning meetings are no longer adjourning with the rosy and reassuring thought that enough people will WANT enough things, after this war, to keep America's productive capacity busy and provide plenty of jobs.

For Management is recognizing that wanting-power is not necessarily buying-power.

They're realizing that a man with \$100 in his pocket may want a new radio, a new suit of clothes and a new vacuum sweeper... but unless their cost enables him to buy all three, one is going to remain unsold.

THE \$150,000,000,000 QUESTION

It's becoming more and more apparent that the creation of value... of providing "more for the money"... is the only permanent basis for a sound economy under our free enterprise system. Only by increasing what wages will buy can 40% more people be put to work than were employed in 1940, national production maintained at a 135 to 150-billion dollar level.

HOW CAN THIS BE DONE?

What more can be done to cut costs? For one thing, economic waste has already been largely streamlined out of direct manufacturing costs through straight-line production.

But war production experience has pointed to another major opportunity for reducing non-productive costs in business. Only under the stress of war have many companies found what a staggering load was being added to costs—by ineffective systems of control... by excessive paperwork... by inefficient and expensive methods of writing forms, making records and using them.

A great potential of cost reduction has been clearly marked out in experiences such as saving 30,000 man-hours previously lost annually in a system of obtaining material from a manu-

facturer's stores department. And, for another example, eliminating 79% of the labor cost of writing and filing 50,000 sets of forms for Factory Service Orders—saving \$10,364.

Studies by Standard's systems experts and their Formcraft Engineering staffs of analysts, form designers and business machine specialists have demonstrated this opportunity almost everywhere. ★ ★

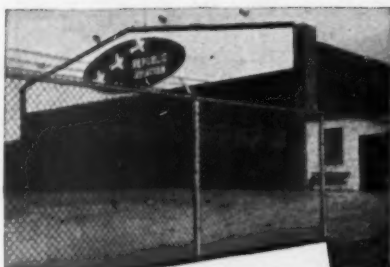
The installation of Standard's systems at present depends on current manufacturing facilities and "war needs first." However, preparatory studies in your business NOW might aid in planning your answer to tomorrow's "150 billion dollar question." Would you like to see some actual case studies? Write for a sample Formcraft Digest and check list.

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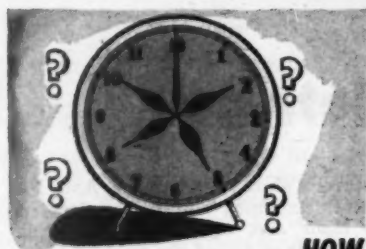


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No matter what your fencing problem—it pays to get the benefit of Anchor's 52 years' experience on every type of industrial fence, barrier, and enclosure: chain link, barbed wire, woven wood, board, other special constructions. Anchor's 16 branch offices provide speedy nation-wide service. Write for Free Industrial Fence Catalog and name of nearest Anchor Fence Engineer. You may be surprised to learn how Anchor's experience can save you headaches, time, money!

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HOW OFTEN SHOULD A WATCH- MAN MAKE HIS ROUNDS?

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Vital problems bearing upon the safety of your plant properly are discussed in the **DETEX** Plant Protection Manual. Send for your **FREE** copy today.



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Sales and Service in All Principal Cities

DETEX

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NEWMAN ★ ECO ★ ALERT ★ PATROL

up to \$2,500 on the same ration basis as lower-priced hard-top cars. Formerly, anyone could get a certificate for the higher-priced hard-top automobile if the car was needed for business or for work contributing to the war effort or to the public welfare. Requirements for cars selling for \$2,500 or more and for 1941 cars driven less than 1,000 miles remain unchanged. (Amendment 13, Ration Order 2B.)

Oil and Gas Wells

Federal restrictions on the drilling and equipping of oil and gas wells throughout the country have been eased by action of the Petroleum Administration for War. Subject to certain conditions, a dry gas well may be drilled anywhere (except in areas designated as "restricted" by PAW) if it is the only drilling or producible well

in an area of 640 surface acres. Materials costing up to \$10,000 for one operation are now automatically authorized for gas gathering lines and gas lift and booster plants, and for natural gasoline recovery, gas treating, cycling, and pressure maintenance. The reworking, redrilling, or deepening of any gas or oil well is permitted. (PAO 11, as amended.) Drilling controlled by supplementary orders applicable to specified parts of the country is not affected by this order.

Petroleum

To take care of sharply increased military demands for petroleum and petroleum products—particularly fighting-grade aviation gasoline—the Office of Defense Transportation has notified oil companies that tank car loadings of these vital oils must be



American Red Cross
(Two blood donor centers)
Basalt Rock Co., Inc.
Napa, Calif.

Blaw-Knox Construction Co.
Ambridge, Pa.

Brair Hill Stone Co.
Glenmont, Ohio

Brit Equipment Co.
Ambridge, Pa.

Brown-Line Gear Co.
Buffalo, N. Y.

Chicago Bridge & Iron Co.
(Two plants)

Clopax Corp.
Cincinnati, Ohio

Eagle Signal Corp.
Moline, Ill.

Electro-Voice Mfg. Co., Inc.
South Bend, Ind.

Ethyl Dow Chemical Co.
Wilmington, N. C.

Federal Electric Co.
Chicago, Ill.

Federal-Moguel Corp.
Greenville, Mich.

General Cable Corp.
Bayonne, N. J.

General Engineering Works
Chicago, Ill.

General Motors Corp.
Bay City, Mich.

Ben C. Gerwick, Inc.
Hunters Point, Calif.

Goodyear Tire & Rubber Co.
Decatur, Ala.

Henry C. Grebe & Co., Inc.
Chicago, Ill.

Harper-Wyman Co.
Chicago, Ill.

Hexagon Tool & Engineering
Corp.

Dearborn, Mich.

Hillerich & Bradshy Co.
Louisville, Ky.

P. R. Hoffman Co.
Carlisle, Pa.

Holophane Co., Inc.
Newark, Ohio

Kewaunee Shipbuilding & En-
gineering Co.

Kewaunee, Wis.

Harry Lang Co.
River Falls, Wis.

Litton Engineering Labora-
tories

Redwood City, Calif.

H. W. Loud Machine Works
Pomona, Calif.

McCarty-Johnson Plumbing &
Heating Co.

Denver, Colo.

Morgan Bros. Co., American
Bridge Co. Shipyard

Ambridge, Pa.

Motigraph
Chicago, Ill.

National Gypsum Co.
Niles, Ohio

Oiljak Mfg. Co.
Montclair, N. J.

The Parkersburg Rig & Reel
Co.

Parkersburg, W. Va.

The Perfect Circle Co.
(Four plants)

Rheem Mfg. Co.
New Orleans, La.

The Schaible Co.
Cincinnati, Ohio

The Steel Products Engi-
neering Co.

Springfield, Ohio

I. Stern & Co., Inc.
New York, N. Y.

Sturgeon Electric Co.
Denver, Colo.

Tri-Clover Machine Co.
Kenosha, Wis.

United Cork Cos., American
Bridge Co. Shipyard

Ambridge, Pa.

U. S. Gauge Co.
Sellersville, Pa.

Vanco Machine & Engineer-
ing Co.

Grosse Pointe Park, Mich.

Vandercook & Sons
Chicago, Ill.

Victory Ordnance Corp.
Peru, Ind.

Vörset Corp.
Oxford, N. J.

Wehr Steel Co.
Milwaukee, Wis.

Worcester Stamped Metal Co.
Worcester, Mass.

Yale & Towne Mfg. Co.
Stamford, Conn.

York Corrugating Co.
York, Pa.

(Names of winners of the Army-Navy and Maritime Commission awards for excellence in production announced prior to this new list will be found in previous issues of Business Week.)

PHILCO FLOTÉ BATTERIES

**ELIMINATE THE PROBLEM OF LOW
CELLS IN FULL FLOAT SERVICE**



Typical Philco Battery Installation, Pennsylvania
Telephone Corporation, Johnstown, Pennsylvania

When Philco engineers pioneered the famous Floté grid, they eliminated for keeps, the problem of low cells in full float service. By casting the grid in a special metal, developed by Philco research expressly for this purpose, they changed the chemical reaction within the cell so as to remove the *cause* of low cells. This important milestone in storage battery progress is one of many advanced features which make Philco Batteries tops in efficient, trouble-free performance and long service life. It is one of the reasons why so many prominent Telephone, Power, Light and Industrial companies specify Philco Batteries, over and over again. Write for latest Philco Battery catalog featuring batteries for your specialized needs.

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Storage Battery Division, Trenton 7, New Jersey

***Specify* PHILCO STORAGE BATTERIES**

**Backed by 50 years of experience
in industrial storage battery development.**

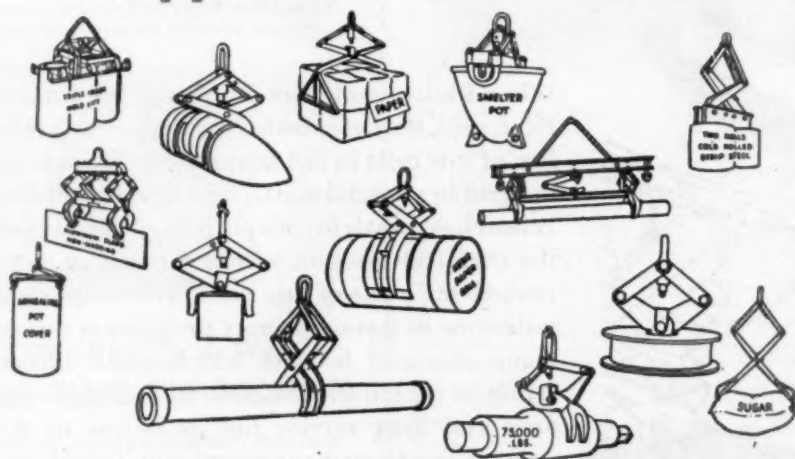




Handle your materials the modern way—
the faster, safer, more economical way—

USE

Heppenstall Safe-T-Tongs



No matter what you handle—if the operation is repetitive—the answer is Heppenstall Tongs . . . Heppenstall makes 'em to handle any weight, shape or type of material. They're fully automatic. They pick-up, land and release a load simply by raising and lowering the crane. They're the fastest, safest, most economical method known in material handling. Write for booklet. Heppenstall Company, Department BW, Pittsburgh, Pa.

Forging Fine Steels for Over 55 Years

given preference over all other tank car shipments. Shipping and loading operations must be carried on every day, including Sunday. Railroads are called on to speed petroleum shipments by reducing the turn-around time of all tank cars.

Petroleum Administration for War has established minimum viscosities for various grades of civilian oils manufactured, delivered, or received in the Pacific Coast states (PAW District V). (Petroleum Distribution Order 22.)

Wool Imports

Ceiling prices for foreign wools, wool tops, and wool top future contracts will be adjusted on prevailing commercial rates for war risk insurance, not on rates previously offered by the War Shipping Administration. This OPA announcement was made because WSA discontinued writing war risk insurance on wool after June 25. The amounts which may be added for war risk insurance in determining ceiling prices for foreign shorn and pulled wools, including carpet wools, must not be greater than the cost of such insurance written by WSA. (Revised Price Schedule 58.)

Tin

Restrictions on uses of tin have been revised by WPB to raise from 21% to 30% the tin content of solder which may not be used except as specifically authorized, and to require certification for the purchase of all solders. Radio, radar, electrical appliances are added to the list of products in which solder containing more than 35% tin may be used. Fabrication of terne plate is added to the list of operations in which solder with this same tin content is permitted. (Order M-43, as amended.)

Scrap Aluminum Foil

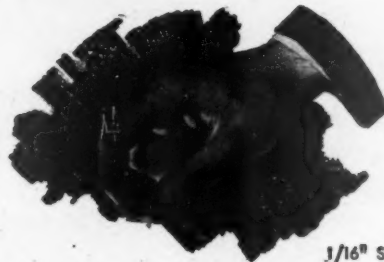
OPA has set a maximum price of 16¢ a lb. for clean scrap aluminum foil (including light-gage aluminum sheet not more than .006 in. thick). Formerly, scrap aluminum foil was subject to General Max. This price has been established because new uses of the foil have been developed, and considerable scrap has accumulated as a result. Preparation of low-grade aluminum residues, such as drosses, skimmings, grindings, and sawings, is also given a special pricing procedure. (Amendment 6, Regulation 2.)

Lumber

To implement further the lumber controls established by Order L-335 (BW—Jul. 1'44,p74), WPB has issued five directions that establish specified percentages of output which sawmills are required to set aside for military orders. Percentages vary with the size of the mill and with the kind of wood. Species covered by the directions include Douglas fir, ponderosa pine, redwood, southern yellow pine, red or yellow cypress.

Sawmills producing lumber from Douglas fir, white fir, noble fir, Sitka spruce, and West Coast hemlock, that are averaging 25,000 b. ft. or more a day or that did

NO ESCAPE



1/16" Shaft diam.

WHEREVER there is a rotating shaft that must be sealed against the escape of gas, air or liquid—there is a Sylphon Shaft Seal to meet the individual requirements. Compressors, pumps, washing machines, hydraulic transmissions and a host of similar applications have conclusively demonstrated the unique advantages of Sylphon Shaft Seals.

A Sylphon Shaft Seal, properly installed, rarely requires any further attention. The seal nose is machined to "thousandth-of-an-inch" tolerance, and the heart of the seal is the Sylphon Bellows . . . positive assurance of perfect, trouble-free sealing.

Friction loss is reduced to a minimum by using anti-friction metals such as leaded bronze, oil impregnated porous bronze and graphited bearing bronze.

A wide variety of types and sizes are available, and many applications have been made to machines originally designed to carry other types of seals.

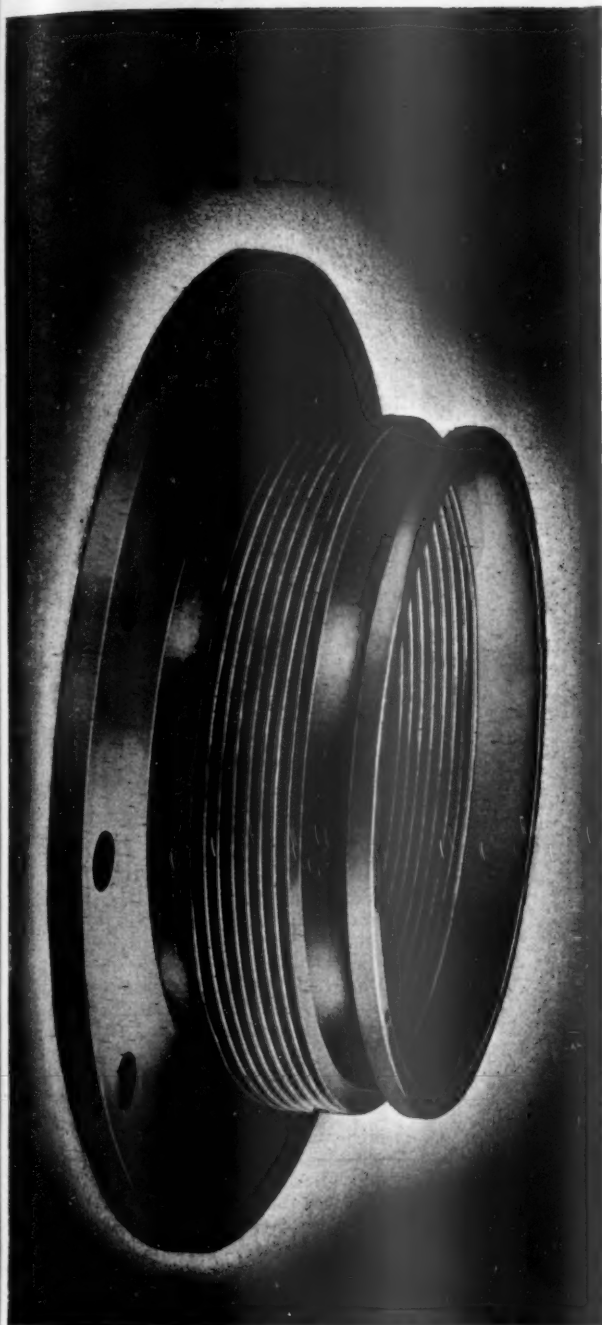
Investigate Sylphon Shaft Seals. Send for Bulletin OW-825.

SIZES—Sylphon Shaft Seals have been made in sizes from 1/16" to 16" shaft diameter.

PRESSURES—Correct engineering, accurate machining and careful balance produce a perfect seal against any pressure up to hundreds of pounds, with a minimum of friction.

SPEEDS—Generally used for shaft speeds up to 400 RPM, but successful at much higher speeds.

CORROSION—Highly resistant to fluids and gases which affect ordinary packing materials.



A 16-inch diameter shaft seal, for a secret military application.

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Modern Gas Heat-Treating

is "Tailor-made"



Gas engineers "reach into the file drawers"

for the right application for a given product

Your tailor cuts your suit to your precise measurements. Gas heat-treating of metals does exactly that. The Gas industrial engineer and the manufacturer of heat-treating equipment are on the same victory team: All they need to know is—what physical properties do you want in your final product? With that information, they can usually draw upon standard units of modern Gas equipment to solve your problem.

Frequently it may require putting together standard parts in a special arrangement. But, whether your product is a tiny metal ball of some special alloy or a slab of steel weighing 20

tons, there is a Gas heat-treating technique which can usually be accomplished with standard parts. And almost invariably installation cost and unit cost can be lowered.

By all means, check with your Gas company on today's new Gas heat-treating techniques . . . not only for today, but for post-war.

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INDUSTRIAL and COMMERCIAL
GAS SECTION

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THE TREND IS TO GAS

FOR ALL
INDUSTRIAL HEATING

BUY WAR BONDS—HELP SPEED VICTORY!

average that amount daily on their operating days in the six months ended Dec. 3, 1943, must allow military orders preference over other orders up to 35% of their expected monthly shipments. The only orders over which military demands do not take precedence are those rated AAA. (Directions 1, 2, 3, 4, 5, Order L-335.)

Farmers in all states who need lumber for essential maintenance and repair work on farms may obtain preference ratings of AA-3 and, in some cases, of AA-2, the War Food Administration has announced.

Firewood

To halt diversion of firewood to other channels, OPA now requires that producers' prices for pulpwood produced in the western half of the U. S. may not exceed producers' maximum prices for firewood established by local OPA rulings. (Amendment 65, Revised Supplementary Regulation 1.)

Other Price Actions

In a series of actions, OPA has established retail markups for additional fresh fruits and vegetables, packaged vegetables ready to cook, sweet peppers, cucumbers, melons; has set maximum prices for all melons, including watermelons, and for certain berries; has established an adjustable pricing method for larger containers of frozen asparagus, spinach, peas, and strawberries; and, with War Food Administration, has announced that growers' and processors' ceiling prices for the 1944 pack of canned and frozen apricots will include raw-product costs increases since 1941, and has established grower support prices for dried apricots, peaches, and pears (Amendment 19, Regulation 422; Amendment 20, Regulation 423; Amendments 33, 34, 36, Regulation 426; Order 27, Section 9, Regulation 409.) . . . Domestic tung oil has been given dollar-and-cents ceiling prices by OPA in Amendment 27, Regulation 53. . . . OPA Regulation 36 establishes dollar-and-cents ceiling prices per 100 lb. for gum rosin for a 60-day period. . . . To encourage importation of the raw roots and flowers for processing rotenone and pyrethrum products, ceiling prices on these plants have been raised by OPA Revised Regulation 298. . . . Sales of accumulated stocks of food by government agencies to licensed ship suppliers or to corporations designated by War Shipping Administration are exempt from price control under Amendment 1, Supplementary OPA Order 81. . . . OPA has brought all sales of flameproof cotton insulation under a single order, MPR 544.

Other Priority Actions

To further conserve manila fiber, WPB has provided a 25% reduction in manila processing quotas and is allowing manufacturers of cordage to process manila rope for only the ten uses listed in Order M-84, as amended. . . . Chromium metals may not be used to make nickel-chrome resistance wire under Direction 2, General Preference Order M-18-a, and such wire may not be delivered for use in domestic or commercial electric appliances, WPB has announced.

FINANCE

(THE MARKETS—PAGE 118)

'Katy' Comes Out

M-K-T provides good case study of how war has helped railroads. Katy has cut debt and renovated its properties.

For a case study of what the war boom has done for a railroad, consider the case of the "Katy"—the Missouri-Kansas-Texas R.R.

At the year-end of 1940 the Katy was completing a disastrous seven-year stretch during which earnings failed by almost \$12,500,000 to cover fixed interest charges.

• **Got RFC Loan**—Despite a \$2,824,000 loan grudgingly granted by the Reconstruction Finance Corp. in 1938 to pay interest, taxes, and some maturing debt, the road's cash by then had slipped to \$2,573,000, hardly enough to pay fixed charges for six months.

The Katy's current liabilities at the close of 1940 were about \$400,000 more than its current assets. And gone were the working capital of \$12,659,000 and the cash and government bondholdings of \$11,440,000 it had when it first entered the depression 1930's.

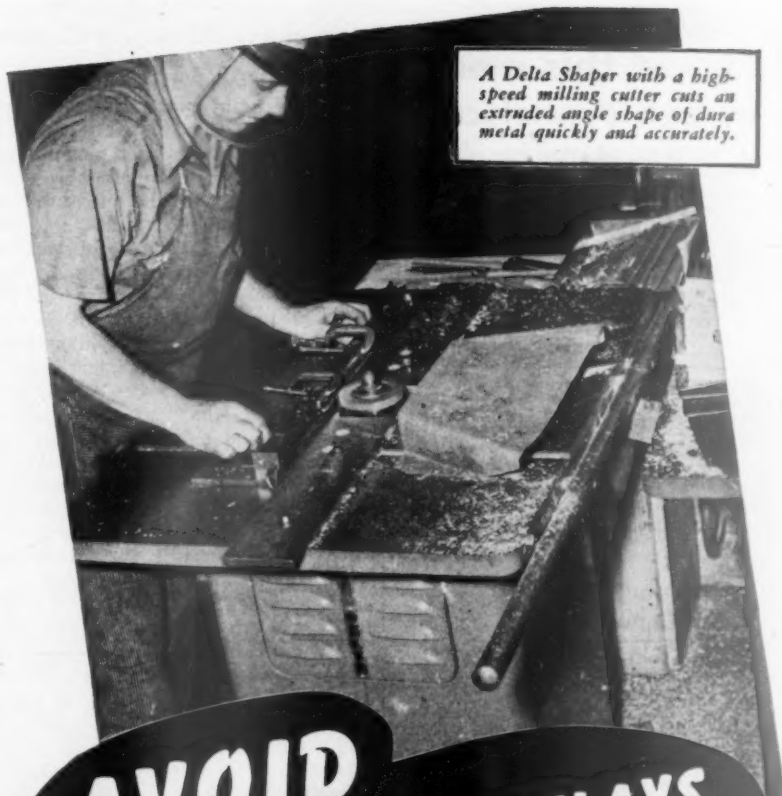
• **Faced Big Task**—But what was perhaps even more serious, because of deferred maintenance, 43% of the road's engines and 12% of its freight cars were then laid up awaiting major repairs.

So hopeless did the road's situation appear around 1940, in fact, that the Katy's first mortgage bonds sold on the New York Stock Exchange for as little as 19¢ on the dollar. Although interest was never defaulted, the road's various second mortgage issues were obtainable for as low as 74% of par value, while its preferred could be bought for \$1.50 and the common for only 25¢ a share.

However, the war began to stimulate the Katy's traffic in the latter half of 1941, and that year it managed to cover its fixed charges fully.

• **Reaches New Highs**—By 1942, the tonnage-haul had become almost twice as heavy as two years previously. Total revenues ran 113% above 1940 levels, and fixed interest was earned over two and one-half times, the highest coverage ratio in the Katy's history.

In 1943 the road's revenues were almost three times those of 1940. Federal and other taxes soared far beyond any previous levels, and operating costs were up sharply. Nonetheless, net in-



**AVOID
RECONVERSION DELAYS
BY SPEEDY RETOOLING**



Delta's 76-page Blue Book gives you 140 examples...

... actual case histories in which special-purpose machines for war production were built around standard Delta components — low in cost, compact, readily available, quickly adaptable when requirements changed. The same ingenious combinations can be used in reconverting for peace.

Write for your free copy.

...with compact, adaptable Delta-Milwaukee Machines

..and get the same running start that helped American industry to convert for war

When the call is for quick action — without waiting for elaborate, costly, and often inflexible special machines — Delta tools are a life-saver. In retooling for war — and in meeting today's demands for lightning-fast model changes based on yesterday's combat experience — they have played a significant part in saving vital days, weeks, or even months. They're ready to do it again — when you reconvert for peace. Investigate today!

ME-10

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Please send me my free copy of your new 76-page Blue Book, and catalog of low-cost Delta Tools.

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MILWAUKEE
Machine Tools**

Need this man in San Francisco?

A MATURE, adaptable man who responds with thoughtful enthusiasm to difficult jobs... if convinced they're worthwhile.

He has had long, varied experience in advertising; selling; organization; personnel. He knows the Pacific Coast. He knows how to dig-up what he doesn't know.

He seeks to work for and with a man who expects high responsibility, resourcefulness, good judgment of people and trends; and who is able enough to use and value these qualities.

Address: E. M. W. c/o Maurice C. Lodge, 116 New Montgomery Street, San Francisco 5.

Universal Pictures Company, Inc.



DIVIDEND

The Board of Directors has declared a dividend for the third quarter of 50 cents per share on the stock of the Company, payable July 31, 1944 to stockholders of record July 19, 1944 and a dividend for the fourth quarter of 50 cents per share payable October 31, 1944 to stockholders of record October 16, 1944.



Investors Mutual, Inc.

DIVIDEND NOTICE

The Board of Directors of Investors Mutual, Inc. has declared a dividend of twenty cents per share payable on July 15, 1944 to shareholders on record as of June 30, 1944.

E. E. CRABB, President



HANSEN ONE-HAND TACKER

HANSEN TACKER, illustrated, is used for tacking, fastening, assembly jobs. Drives 2-pointed tackpoints. Self-contained. One-hand operation. Drives fast as you grip. Investigate!

REQUEST FOLDER

A. L. HANSEN MFG. CO.
5130 RAVENSWOOD AVE. CHICAGO 40 ILL.

come wasn't so far under 1942's record-breaking report.

• **Profits Plowed Back**—But what is more important, when the war began to stimulate traffic, the Katy embarked on a program that involved plowing back into the property every available dollar of earnings to enable the system to meet the demands that it foresaw.

As a result, expenditures for maintenance of roadway and structures, which in the depression years had averaged \$3,850,000 annually, climbed to \$4,800,000 in 1941, to \$10,850,000 in 1942, and soared to over \$19,000,000 in 1943.

• **Property Renovated**—With such funds the road has been strengthening every element of its fixed property, including the laying of substantial amounts of heavier rails and new ties, reballasting, improving the drainage and roadbed stabilization of its main line, strengthening bridges and extensively improving important freight yards.

Large sums have been spent on Katy's motive power and freight cars, too. Over 232 engines went through its shops in 1942 and another 257 in 1943. At the end of 1943 it was thus able to report only 22, or 7%, of its engines awaiting major repairs. Virtually all its freight cars, also, are in a condition to meet the present demand.

• **Debt Cut**—Despite all the cash going into the property, however, Katy has been able to embark on one of the most comprehensive debt retirement programs thus far in operation among the Class I carriers.

Its mortgage bond debt, totalling \$92,979,000 at the close of 1940, had been cut to \$71,290,000 by the close of 1943 through company purchases in the open market. This year it has retired an additional \$5,124,000 of bonds—up to a month ago—and further gains in this direction are expected this year.

• **Charges Are Less**—Consequently, fixed charges now are running at an annual rate of some \$3,300,000, compared with 1940's requirement of \$4,351,000. And despite its large expenditure in recent years, Katy recently reported holding some \$11,300,000 cash.

Whether the system will be able in the normal postwar years successfully to combat the unfavorable factors that almost caused it serious trouble until war conditions put them to flight, of course, remains to be seen.

• **They Are Hopeful**—However, present holders of its various securities appear to have very definite hopes in that connection as Katy's 4% first mortgage bonds recently sold at a price of 71½% of par and the various second mortgage 4%, 4½% and 5% issues at 64½% to 75% of par. Even its preferred stock has sold as high this year as \$16.50 and its common at over \$4 a share.

APC Will Unload

Drive is being organized to sell enemy-alien securities in open market. American Potash & Chemical is first offering.

Alien Property Custodian James E. Markham intends to sell within a year all securities of the more than 300 enemy-alien-controlled companies it now owns, or to liquidate such properties if stock offerings are not practicable.

• **No. 1 on the List**—First to be disposed of, according to present plans, is the 90% stock interest in American Potash & Chemical Corp. Markham has just appointed a special advisory group of investment bankers to assist in this operation.

The names of those on the committee have not been revealed. Wall Street believes that the group includes, among others, representatives of Dillon, Read & Co., Kuhn, Loeb & Co., Lehman Bros., and Glore, Forgan & Co.

• **Spread It Thin**—The committee's first job will be to help organize a gigantic sales group of investment dealers to sell the American Potash shares to individual investors under a plan designed by the APC to spread ownership of the company so thin that it will be impossible for any German interests ever again to obtain control of the property.

As many investment dealers as possible will be invited to participate, and



Alien Property Custodian James E. Markham directs the plan by which enemy holdings in the United States will be completely Americanized.



TODAY A JUNGLE TOMORROW A RUNWAY

WILL THEY EVER mount a Diesel Tractor alongside the cannon on a courthouse lawn to honor this great combat weapon?

Anyway, it's an idea! For here's a peace-time builder that's a sensation on the battlefield, winning praises from GIs and Generals alike—moving dirt, rock, sand, frozen tundra and jungle swamp—by the ton and in a hurry.

Tens of thousands of International Tractors are serving the military—in the Army, the Navy, the Marine Corps and the Air Forces. Tractors pave the way for airpower, footpower and firepower . . . *All honor to the men who drive them!*

While these tractors are fighting on the battlefield, it's up to all tractor

operators to conserve equipment here on the home front. *Make it last!* Harvester and the International Power Distributors stand ready to see you through.

If your need for new equipment is vital to the war effort, we will have equipment for you. If your need is less vital we will safeguard your present International Power with every service at our command.

And in the meantime, let's all remember that it's up to all of us to fight harder on the home front . . . fight on the food front—give to the blood bank—buy extra War Bonds—fight inflation. **FOR VICTORY.**

INTERNATIONAL HARVESTER COMPANY
180 North Michigan Avenue Chicago 1, Illinois

INTERNATIONAL HARVESTER

Power for Victory . . . Power for Peace

This is under no circumstances to be construed as an offering of these Debentures for sale, or as an offer to buy, or as a solicitation of an offer to buy, any of such Debentures. The offer is made only by means of the Prospectus.

New Issue

\$10,000,000

The Quaker Oats Company

Twenty-Year 2½% Debentures

To be dated July 1, 1944

To mature July 1, 1964

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Examine this book 10 days on approval. See how easy it is to master the 4 essential fundamentals of effective speaking that will put over any kind of public talk.

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if the method produces satisfactory results the same formula will be followed subsequently with other large offerings. • **Bids to Be Asked**—Smaller corporations, however, are expected to be disposed of through competitive bidding, wherever possible in large blocks.

Thus far, according to Markham, the armed services haven't registered any objections. Should they object that a specific sale would obstruct the war effort, their wishes will be paramount.

• **Appraisal Under Way**—Appraisers are determining the value of American Potash assets, as well as the price at which the company's stock should be offered. But no steps to register and sell the stock are likely to be taken before early fall.

American Potash & Chemical Corp. is one of the nation's largest producers of potash, borax, and soda and their derivatives. Its output is used extensively in the manufacture of fertilizers, soaps, explosives, dyes, photographic materials, and numerous important war products.

• **Profits Held Firm**—Earnings, which managed to stay in the black even during the worst of the depression years, averaged well over \$3 a share from 1929 to 1940. Dividends, though suspended from 1932 to 1935, showed a yearly average of \$1.60.

Profits in 1943 exceeded \$2.60 a share, compared with \$3.04 in 1942 and \$2 in 1941. Since the APC assumed control, dividends have been paid at an annual rate of \$1.50.

• **Expanded for War**—Under APC guidance some \$3,000,000 of the company's own cash has been expended to increase its facilities to meet war demands. The Dec. 31, 1943, balance sheet disclosed total assets valued at more than \$17,800,000.

Cash and government security holdings at the year end totaled well in excess of \$3,100,000 and were more than three times all current liabilities. Working capital was \$4,314,000, compared with \$3,076,000 at the close of 1942; the company had no mortgage or bonded indebtedness outstanding; and an equity for stockholders of some \$38.50 per share was revealed.

• **Traded on Curb**—Though the APC since early 1942 has impounded 479,726 of the 528,390 shares of American Potash stock outstanding, the "free" stock has continued to be traded on the New York Curb Exchange. There it has had a 1944 price range between \$46.50 and \$40 and is now selling at around \$42.

• **A Postwar Offering**—According to APC officials, the prominence of General Aniline & Film Corp. in the war effort (BW-Jul.8'44,p54) likely means that the sale of its stock to American

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At the Gateway to the Pacific

In the port of Balboa at the Pacific terminus of the most important single military installation in the Western Hemisphere—the Panama Canal—stands a branch of an American bank which is bringing a touch of home to men at war.

Thousands of members of the reinforced garrison which guards the great lifeline between the Atlantic and the Pacific have come to rely on this office—one of the four Isthmian branches of the Chase—for countless personal services beyond those normally rendered by a commercial bank. Soldiers and sailors of all ranks daily stream in and out its doors, cashing checks, transmitting funds, arranging for the delivery of flowers and other gifts to loved ones on Main Street, U. S. A.

These personal services, performed without profit, are in addition to the regular wartime

functions of this Chase outpost. Since Pearl Harbor the tasks of the staff there have multiplied. Seventy-five per cent of the business of the branch is now related directly to military activities such as preparing cash pay rolls for the Army, meeting the banking needs of Post Exchanges, caring for Company Funds,

serving contractors on war projects and facilitating vital shipping through the Canal.

Today's Panama looks down on a scene which those who struggled with the torrid jungles of the Isthmus a few decades ago could scarcely have imagined—a great modern fortress guarding the passageway between two coasts, two fleets, two wars! The Chase feels privileged to play its small part in furthering this military effort and in making life more pleasant for those who man the new ramparts of an old land.



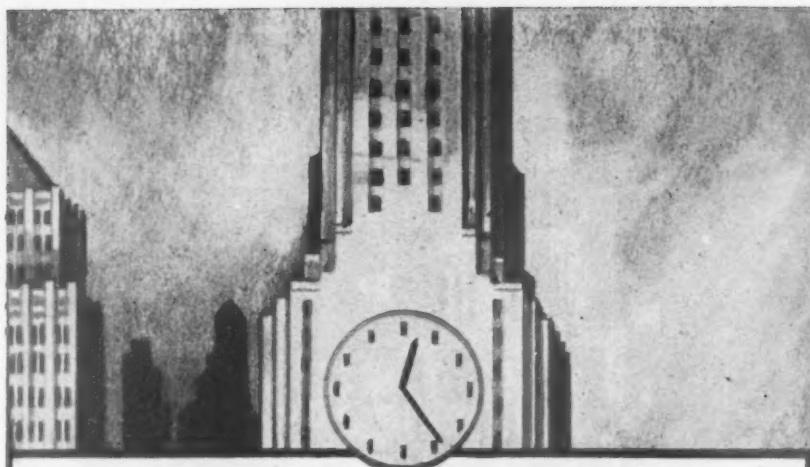
Comparable activities obtain in all four Chase branches on the Isthmus—Balboa and Panama City on the Pacific side; Cristobal and Colon on the Atlantic side.

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SO FAR as Thermoid is concerned, the only thing that counts is *today*—doing the job *now*, never postponing it.

Thermoid is ready *now* with enormously increased production facilities, including those of the Jos. Stokes Rubber Co., which it recently acquired. Thermoid is provided *today* with greatly improved research and laboratory equipment. It is grappling *this minute* with product developments which, when perfected, will benefit you.

Already, in fact, many standard items of the Thermoid line have been improved. Product additions have already been evolved, and await the moment when they may be released.

By accepting *now* as the appointed time . . . by making every minute count . . . we provide you with yet another reason why.

IT'S GOOD BUSINESS TO DO BUSINESS WITH THERMOID

Thermoid Rubber
DIVISION OF THERMOID COMPANY
TRENTON, NEW JERSEY

THE THERMOID LINE INCLUDES: CONVEYOR BELTS • ROLLERS AND RUBBER V-BELTS AND DRIVES • CONVEYOR BELTING • BELT AND ROLLER BELTING • WRAPPED AND MOLDED ROSS • SHIRT PACKINGS • INDUSTRIAL BEARING LUBRICANTS AND FRICTION PRODUCTS • MOLDED HARD RUBBER AND PLASTIC PRODUCTS.

investors won't be possible until after hostilities cease, at least in Europe.

In the past two years, although 350 individual transactions were necessary to complete the job, the agency managed to sell seven of the smaller companies it had taken over, plus various other minor properties that had come into its hands. Properties in which the APO still holds a substantial interest have net assets totaling some \$200,000,000.

• **Other Holdings**—Besides American Potash and General Aniline (which is the largest of all), the bigger companies the agency controls include the American Bosch Corp., a maker of electrical equipment valued at about \$16,000,000; two Philadelphia companies, Rohm & Haas, a \$19,000,000 producer of plastics, and Resinous Products & Chemical Co., Inc., valued at \$7,000,000; and the \$20,000,000 Hugo Stinnes Corp., holding company for Hugo Stinnes Industries.

Also controlled are numerous other companies valued at from \$1,000,000 to \$5,000,000.

Rumors in Check

SEC lays down two rules to curb market gyrations akin to those which gave Park & Tilford common a \$50 skid.

The Securities & Exchange Commission has taken no direct action about the recent sharp gyrations of Park & Tilford, Inc., common stock which were inspired largely by rumors concerning the size of a contemplated whisky disbursement to stockholders and which culminated in a drop of some \$50 in the shares' market value (BW—Jul. 1 '44, p. 66).

• **Two New Rules**—However, SEC has just announced two new rules to prevent abuses in trading before adequate information about contemplated dividends or disbursements is available.

Both, says SEC, are based largely on the trading experienced in the stocks of some liquor manufacturers which recently declared dividends payable in whisky.

• **Reports Required**—Under Rule No. 1, any company contemplating a dividend or disbursement to stockholders must file telegraphic reports with the commission and exchanges where its stock is listed containing a full description of what the corporation has in mind. These reports must be filed not later than midnight of the day the dividend is decided upon. Supplemental reports are required when the originally announced terms are changed and when the

I feel like a heel.

I've been working hard these last few years, and when Joe asked me up to his fishin' lodge for the opening of the season, I said "sure!" Gosh!—it's only a hundred miles. And, besides, I'd heard about a side street garage that sells gasoline without coupons—and only jacks up the price 10 cents a gallon.

We-e-l-l . . . here I am on "black market" gas. But, you know . . . the peace, the relaxation, the fun I usually get from "wettin' a line" is missin'. I began to think . . . (which I oughta done before comin' up here!) . . . about the boys from the neighborhood—and the shop—and the lodge—that are off in some Godforsaken hellhole fighting for me . . . for my family. And I remember too damn clearly the hospital ship I saw unloading a cargo of wounded men off Jersey. Guys all bandaged up . . . blind . . . arms missing . . . legs missing.

Nope, it won't work. I can't soft-soap my conscience with thoughts of my puny war efforts while draggin' down a juicy paycheck each week. Buying bonds . . . being a blood donor . . . and things like that are no sacrifice. I'm actually not "giving" anything—and then to top it all—I buy "black market" gas which puts money in the hands of the enemy called Inflation. That unscrupulous dealer and hundreds like him are outbidding good Americans for food, and homes, and clothes. Do you wonder why "I feel like a heel?"

Listen Mister,

vacation time is here. But before you buy black market gas for that trip to the mountains or seashore, ask yourself if you'd like to be in the same boat—and frame of mind—that I'm in. You'll be stealing gas that's vital to victory. Contributing cold cash to vicious gangsters and thugs who steal and "black market" everything from gasoline to baby food! You'll be doing your very best to add another curl to the spiral of inflation. And, if prices get out of hand—*watch out!* Because you can be *wiped out*—your savings, job, home, insurance, *everything!*

Yep, I've done a lot of thinking. Made a slip I'm not going to repeat,—and one I'm sure you won't make . . . or will you?



DON'T BE A "HEEL" . . . BE A FIGHTER . . . THESE 3 WAYS . . .

- Encourage our representatives in Washington to tax our extra income away. Hard, yes, but not as hard as inflation and saddling our children with War's cost.
- Follow the price control rules. Sure the government agencies have made mistakes. But they're the best we've got and they can do the job if we support them.
- Save—invest in War Bonds for America's post-war future and your own. The suckers are the ones who are spending—not the ones who are saving. Think that through.

ROGERS DIESEL AND AIRCRAFT CORPORATION

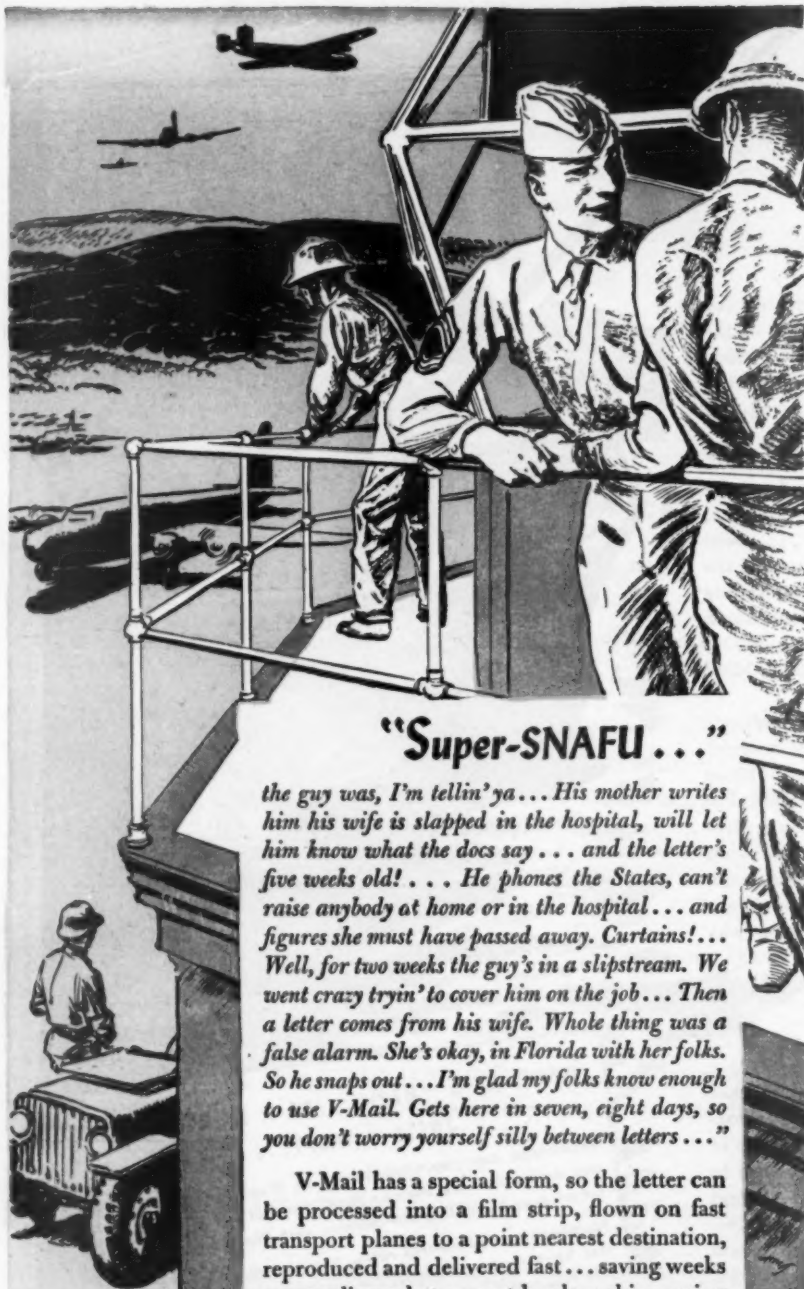
1120 Leggett Avenue, New York 59, N.Y. Builders of diesel-electric equipment and aircraft parts for our armed forces. Divisions: Hill Diesel Engine Company, Edwards Company, Edwards Aircraft Products, Inc., Ideal Power Lawn Mower Company.



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"Super-SNAFU..."

the guy was, I'm tellin' ya... His mother writes him his wife is slapped in the hospital, will let him know what the docs say... and the letter's five weeks old!... He phones the States, can't raise anybody at home or in the hospital... and figures she must have passed away. Curtains!... Well, for two weeks the guy's in a slipstream. We went crazy tryin' to cover him on the job... Then a letter comes from his wife. Whole thing was a false alarm. She's okay, in Florida with her folks. So he snaps out... I'm glad my folks know enough to use V-Mail. Gets here in seven, eight days, so you don't worry yourself silly between letters...

V-Mail has a special form, so the letter can be processed into a film strip, flown on fast transport planes to a point nearest destination, reproduced and delivered fast... saving weeks over ordinary letters sent by slow ship, saving sorely needed shipping space... Send shorter letters, more frequently, the fastest way—with V-Mail! Get forms in stationery, department, drug and variety stores. Or we'll send a packet of six with our compliments. Address below...

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Originators of Metered Mail, world's largest manufacturers of Postage Meters, which permit postage for business mail... now devoted to war production.



dividend or disbursement has actually been declared.

If the SEC should find on the basis of such reports that the information on the proposed transaction is inadequate to permit investors to make a proper appraisal of the security's value, it may then order a temporary suspension of trading in the issue pending more adequate information.

The second rule strengthens operation of the first. It prohibits any over-the-counter trading in a security when the commission has suspended exchange trading in it.

AIR INSURANCE BROADENS

Continental Casualty Co. of Chicago has followed up its recent worldwide accident policy (up to \$200,000 a person for those traveling by air, land, or water outside the U. S. and including war risk) with a new Western Hemisphere aviation policy which is available in \$1,000 to \$200,000 units on an individual or group basis, covering airplane passengers, and crew members, against death or dismemberment by air accidents.

The new policy was designed to cover passengers and crew of any commercial plane on a regularly scheduled flight between U. S. and Canadian cities. But equally eligible for coverage are passengers, and crews, of certified noncommercial planes flown by certified pilots. Also eligible are persons flying via established airlines in or between South America and Central America, the West Indies and Bermuda, Alaska, and in the Hawaiian Islands.

NO. 1 LIFE UNDERWRITER

Because of the growth in National Service Life Insurance, the federal government is running the largest life insurance business the world has ever seen, according to Brig. Gen. Frank T. Hines, administrator of veterans affairs. Hines reports that 15,000,000 applications for policies have been received during the war; these have involved a face value of some \$115,000,000,000, or the equivalent of more than 80% of the face value of all private life insurance outstanding in the United States.

Up to May 31, 1944, Hines reports, service-connected disability pension claims had exceeded 375,000. More than 320,000, or 85%, of such claims had been adjudicated—195,000 allowed and 125,000 turned down.

Death claims have been considerably fewer. However, National Service Life Insurance payments in death benefits showed an accumulative increase from 26,000 in May, 1943, to 73,000 in April, 1944.

PRODUCTION

Ask Radio Bands

Railroads, satisfied with experiments on train control by voice communication, ask FCC for permanent licenses.

Off to a good start through successful experiments, radio communication in railroad operations faces its next big hurdle on Sept. 13, when the Federal Communications Commission opens hearings to determine whether to allocate any of its all too scarce frequency bands to railroads under permanent licenses.

• **Supplemental System**—The railroads will seek to prove (1) the importance of radio communication to the safe and efficient operation of trains, and (2) the value of improved service to the general public.

Realists are not now planning on radio superseding proved and already-installed telephone, telegraph, and automatic signaling devices. But explorations indicate that radio can fill some of the gaps in railroad communications. While two-way radio communication between trains, wayside signalmen, and dispatchers could curtail accidents, radio for safety will not bulk as important as for efficiency and for operating economy.

• **Usefulness Proved**—It is valuable in maintaining end-to-end communication between crews in the caboose and locomotive cab.

Yardmasters can more efficiently direct switch engines, and can speed the classification of freight cars.

Train crews are enthusiastic because radio can cut the drudgery of legwork in picking up or transmitting orders. It can overcome poor visibility conditions. A conductor can give emergency stop signals to the engineer without pulling the emergency air brake and thus risking a break-in-two of the train.

• **Varied Systems**—Some railroads have experimented in the 40-megacycle band of frequencies, while others, missing no bets, have conducted tests with ultrahigh frequency equipment. Both the amplitude modulation (AM) and the frequency modulation (FM) systems are being tested. Induction telephony, which depends on rails and paralleling wires to carry the telephone currents, also is being used.

The Army has released some war-developed inventions and improvements that have proved suitable in the rail-

roads' radio experiments, but military needs will retard release of materials for installations. Until the roads can get some big-scale installations they cannot accurately compute radio costs, but some signal engineers expect these will be less than the telephone induction system.

• **Plane Radio Cited**—Skeptics object that radio operation on numerous trains in a small area will promote a Babel of orders confusing to the trainmen.

Signal experts contend there should be no more confusion in using radio with trains than with airplanes. The normal range of communication of most experimental tests has been five miles, and sensitive sets can keep the voices within the allotted wave bands.

Proponents brush off another stock objection—too-robust railroad vocabularies that might violate FCC regulations and shock listeners-in—by answering that railroaders can control their language as well as can policemen and airline employees.

• **Longest Test**—The longest test of radio communication in point of mileage

was made last month by the Santa Fe system. A 70-car potato train traveled 2,200 miles from Bakersfield, Calif., to Chicago, using radiotelephone communication between caboose and engine under all conditions of terrain and weather. T. P. Brewster, Santa Fe's superintendent of telegraph, claims to be satisfied with the trip and forecasts a rosy future for radiotelephone on the rails.

An ultrahigh frequency amplitude modulation system supplied by the Bendix radio division, Bendix Aviation Corp., was used by the Santa Fe. A telephone hand set, loudspeaker, low-powered transmitter, superheterodyne receiver and power supply were installed at each end of the train.

• **Transmission Problem**—The first problem bewildering signalmen during the Santa Fe test was the tendency of ultrahigh frequencies toward "line of sight" transmission. The effect is that signals are not efficiently received except from an antenna high enough to be seen from the point of reception.

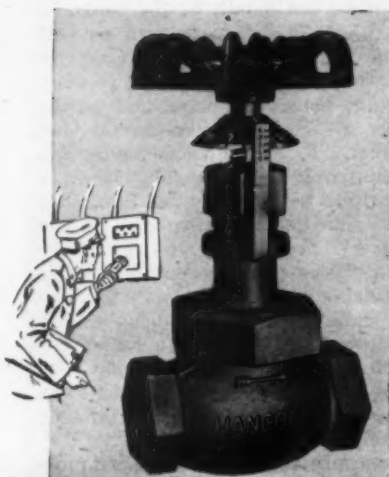
A 55-ft. antenna used in the Los Angeles switching tests would not clear bridges and tunnels along the right-of-way. Engineers eventually evolved a modified turnstile type antenna 24 in.



VACUUM SPINNER

In a vacuum test pit, high-speed fans and turbine impellers of new design can be checked for stresses at their terminal velocities before actual installation. The layout at Buffalo Forge Co., Buffalo, N. Y., consists of a six-foot cylindrical pressure chamber in which these rotor blades are whirled

by an air turbine on the outside. With pressure in the cylinder reduced to 0.00787 in. of mercury, air resistance is so cut that a fan which normally might require 4,000 hp., can be tested with only $\frac{1}{4}$ hp. Gages on the nearby test panel measure strain and vibration, while a glass window in the chamber permits observation of the blades under stroboscopic light.



METERED FLOW

The amount of flow of liquids, steam or gases through a Hancock Flo-Control Valve may be controlled as accurately as the gas that flows through your gas meter at home.

Once the desired valve setting has been determined within a hundredth of a turn of the hand-wheel, the precise point may be recorded and returned to at will. Volume of flow can be regulated to an exact amount.

There is no good way to fix the setting of an ordinary valve. Marking it with chalk, a dot of paint or a piece of string were the old-fashioned, crude methods.

The scientific engineering way of the Hancock Flo-Control Valve leaves nothing to chance or a workman's judgment.

With this basic advantage, it also must be remembered that you find in them the exceedingly high quality of general design, materials and workmanship found in all valves bearing the name "Hancock."

Whenever you need valves, specify "Hancock."

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high, including its base. The antenna design and the ultrahigh frequencies permitted transmission without "line of sight" limitation.

The only hitch in receiving signals on the trip came when various parts of the long train were in three tunnels simultaneously.

• **FM Also Studied**—Also using Bendix equipment, the Chicago, Burlington & Quincy Railroad is concentrating in the AM frequencies above 150 megacycles, where channels are less crowded, and perhaps are more readily available for permanent assignment.

Two-way communication is being explored between the assistant superintendent's office and 75 switching crews in the Chicago yards. Later, tests will be made at other points between Chicago and Denver, and between Lincoln, Neb., and Billings, Mont. FM also will be studied. Whatever is learned will be made available to the railroad industry.

• **Early Installations**—The Chicago, Rock Island & Pacific Ry. Co. claims to be the first railroad to conduct experiments with its own equipment.

An FM system operating in the 40 megacycle band of frequencies with a communication range of 25 miles, is undergoing tests at the railroad's Blue Island (Ill.) freight yards.

A vocal highball recently sent a mile-and-a-quarter-long Rock Island freight train from Chicago to Kansas City in a front-to-rear communication experiment.

• **Tried on Zephyr**—The recent rash of radio tests follows years of voice communication trials.

Fifteen years ago, the Santa Fe tested radio in its big yards at Los Angeles, but the equipment and frequencies used at that time were found to be impractical.

The Burlington achieved some success in using a short-wave radio on a nonstop run of the first Zephyr from Denver to Chicago ten years ago. For the past year and a half, the Burlington has used inductive or wired wireless communication at its Galesburg (Ill.) yards, with a similar installation at its New Lincoln (Neb.) yards.

• **Used in Yards**—Pennsylvania Railroad installed the Union Switch & Signal Co.'s induction telephone-radio system on its 67-mile branch between Trenton and Philipsburg, N. J. (BW—Feb.26'44, p48). A somewhat similar method was inaugurated in several U. S. freight yards four years earlier (BW—Nov.30'40, p34).

Last April, Denver & Rio Grande Western Railroad used General Electric FM equipment on a 1,140-mi. round-trip freight train run between Denver and Salt Lake City (BW—Apr.29'44,

p66). Chicago & North Western learned early lessons from an experimental installation of radiotelephony at its Elgin (Ill.) yards in 1940.

• **Experiments Watched**—To eliminate duplicate testing, other railroads are watching these experiments.

Not until FCC acts favorably on permanent licenses, and until equipment is released after the war, will it be clear how deeply the railroads want radio to supplement their other signal systems. At present, twenty-two applications for experimental permits are pending with FCC.

FIBERS RESIST WRINKLES

Profound effects on the postwar textile industry, including a possible reversal of the industry's trend away from natural fibers to synthetics, are foreshadowed by six new achievements in chemically treated fibers and fabrics revealed this week by the Monsanto Chemical Co., St. Louis: (1) wrinkle-resistant woollens for suits and overcoats that promise to hold their legitimate creases throughout a rainy day; (2) shrinkless wool; (3) shine-resistant serge; (4) doubled wear for both wool and cotton; (5) run-proof hosiery; (6) increased repellency to water and improved color fastness to washing or dry cleaning for cottons and rayons.

Some of the results are achieved by invisible, submicroscopic films of plastic on fiber surfaces; others by chemically impregnating each fiber right to its heart. Nonrun stockings are said to get that way through the "deposit of silica or submicroscopic grains of sand, which prevents the fibers from slipping out of the positions into which they were knitted." All of the developments, it is claimed, produce the desired effects "without in any way changing the feel or texture of the material."

Especially appealing to the woolen trade are the wrinkle-resistant woollens with which to counter postwar competition long promised by wrinkle-resistant and crease-retaining suitings of nylon and other synthetic fibers (Report to Executives; BW—Mar.4'44,p47).

TO PRODUCE MORE P-51's

North American Aviation, Inc., turned out its final B-25 Billy Mitchell bomber—No. 3,208—at its Inglewood (Calif.) plant last week.

Facilities will be used to produce more P-51 Mustangs, the fighter plane that recently set a new cross-country speed record (BW—May20'44,p15). However, the B-25's, the same basic type as those which first bombed Tokyo, will continue to be produced at the company's Wichita (Kan.) plant.

Sand Reclaimed

Dodge Chicago process of molding castings of aluminum and magnesium makes possible recovery of 98% of the sand.

The Chicago aircraft engine plant operated by the Dodge division of Chrysler Corp. faced the problem of obtaining sufficient sand for molds and cores for its huge aluminum and magnesium foundries. When running at capacity, the foundries each month pour 5,000,000 lb. of aluminum and 3,000,000 lb. of magnesium—more than any similar foundry in the world.

• **Savings on Sand**—Dodge engineers in Chicago threw away the book. First, savings were made by using bank sand from neighboring Indiana dunes, costing about \$1.25 a ton at the pit, instead of the Ottawa (Ill.) silica sand, ranging in price above \$2.50. The Indiana sand was adopted after repeated tests had proved it satisfactory for engineering purposes.

In designing the foundries, Dodge discarded the conventional practice of molding with moist sand that has been mulled and otherwise conditioned with clay and water. Instead, they went over to making their molds of conventional

core mix: sand, oil, and cereal binder, baked like cores.

• **Reclaiming Is Accelerated**—This, of course, required additional oven capacity. But it allowed the use of the same sand for both cores and molds. Having only the one type of sand to reclaim eliminates the problem of segregation for reconditioning, making it possible to reclaim as high as 98% of the sand.

A trend toward reclaiming sand, instead of bringing in new sand for each pouring, was accelerated by the war. New foundries which were built to appease war's great appetite for castings installed reclamation units to save money, lessen the burden on transportation facilities, assure an adequate supply of sand, and eliminate the used sand disposal problem.

• **Furnaces Modified**—Two Nichols Herreshoff furnaces, designed originally to roast zinc and other ores, underwent slight modifications providing conveyors needed for reclaiming sand. Each furnace can recondition an average of 14 tons an hour. With one operating in the magnesium foundry and the other in the aluminum, the annual reclamation capacity is 471 carloads of sand. To care for expected production increase, another furnace is being installed in the aluminum foundry.

Exact costs of operation have not been determined. Gas fuel for the furnace—the greatest expense—is about 50¢



The exigencies of amphibious warfare have caused the creation of a whole new set of tools, one of which is the "Alligator."

The Alligator was first outlined on a drawing board, for it is on paper that new ideas take shape. Paper plays a major role in the Nation's war effort just as it has been a basic component of our civilization since the dawn of knowledge.

At the present time, serious shortages are hampering the production of sufficient paper for all civilian and military needs, but the paper makers, and among them W. C. Hamilton & Sons, are doing their best to meet the demand.

For essential uses, Hamilton Papers can still supply those "good papers for good business." Rely on your Hamilton merchant to do his best to help you.

W. C. Hamilton & Sons, Miquon, Montgomery County, Pennsylvania... Offices in Chicago, New York, and San Francisco.

HAMILTON PAPERS



HOT BATH SALTS

Employing a series of electric salt bath furnaces, the Industrial Steel Treating Co., Jackson, Mich., has put the ordinarily tricky job of selective copper brazing on a foolproof production basis. By plunging parts in

molten salt—1550F for preheating, 2090F for brazing, and 1150F for quenching—decarburization is eliminated, rejects are kept down, and time and cost involved in straightening are negligible, the concern claims. And the customary flux is not needed—the salt acts as flux.

TAKE A HOT TIP FROM THE ALUMINUM INDUSTRY...



...on how to knock
your production costs cold

- 1 Not many people realize it, but there was a time when aluminum was actually worth its weight in gold. That was in 1852... when the laboratory cost of the weight-saving "white metal" stood at \$34.06 an ounce.



- 3 An essential "tool" that helped aluminum makers get so far, so fast, was automatic instrumentation. It permitted more-exact control in mass-production than craftsmen previously attained in tedious batch-processing. As leaders in the development of advanced production control, Foxboro was called upon to supply a major part of this critical instrumentation.

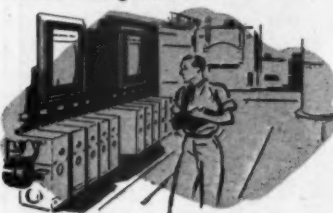
THE story of aluminum is only one of the many dramatic, industrial success stories that makes "Foxboro Instrumentation" a synonym for "cost reduction" to production engineers.

In foods, textiles, petroleum, paper, rubber...and scores of other industries...Foxboro Instrumentation is pointing the way to advances in production methods as revolutionary as those achieved for aluminum.

Wherever your production involves critical temperature, pressure, flow or



- 2 Since then, aluminum makers have performed one of the great "miracles" of production history. Using the most advanced techniques in the mass-production book, they have pushed costs down from \$545 to 15c a pound... made this metal an industry-wide money saver as well as a weight-saver.



humidity, you're bound to benefit from applying this same proved production tool. Foxboro Instruments can help you effect efficiencies that will help put your plant "up front" in the competitive years ahead! The Foxboro Co., 120 Neponset Ave., Foxboro, Mass., U. S. A. Also Montreal, Canada. Branches in principal cities.

FOXBORO

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a ton of reclaimed sand. Each furnace requires one operator.

• **The Process**—The caked sand, after being knocked off the casting, is shaken to pieces in vibrating machines. Conveyor belts move the dirty sand past inspectors, who pick out metals and wires, then to a breaker screen and a storage hopper.

Thence the sand is taken by elevator to the furnace for burning out the oil, cereal binder, inhibitors, and any other impurities at 1,300F to 1,350F. The sand is slowly pushed downward by rabble arms from one to the other of the ten hearths of the 40-ft. furnace, and eventually drops into a 29-ft. Link-Belt cooler drum where just enough water is sprayed to cool the sand but still allow it to come out dry.

An hour and a half after entering the furnace, the sand emerges from the cooler on to conveyor belts to be taken to storage bins ready for reblending and reuse. Dust collectors over the furnace and the cooler have removed the fines (grains too small to be used).

NEW USE FOR DDT

Experiments at the Colorado State College of Agriculture, at Fort Collins, Colo., have established the effectiveness of DDT, the versatile new insect killer (BW—Feb. 12'44, p61), in combating the spruce budworm, which vies with fire for the title of worst enemy of American forests.

The Dept. of Agriculture estimates that the worms killed 225,000,000 acres of coniferous trees between 1910 and 1920. The pest is spreading, infecting vast acreages, both in the U. S. and Canada, and is annually killing millions of dollars worth of forest. Methods still have to be devised for covering whole forests with the insect killer.

The experiments also showed that DDT would kill the potato psyllid, and that it is effective against the wood ticks.

MARS LIGHT GOES RED

In place of the oscillating white headlight it has used since 1936, the Chicago & North Western Ry. is installing on its diesel-powered streamliners and several steam locomotives a light that burns white while the train is in motion, red during an emergency stop.

In the new adaptation of the Mars headlight, the white beam, which oscillates in a figure eight and thus escapes the obstructions which conceal the orthodox light, is visible for ten miles. The red beam, which serves as a stop signal to oncoming trains, is visible for five miles in clear weather, and for considerable distances in rain and fog.

Redwoods at War

Multitude of wartime uses found for California's big trees; plenty of them will remain to awe the tourist trade.

To the West Coast visitor, the stately redwoods and giant sequoias indigenous to California are prime tourist attractions. But like the tourist, the redwoods have gone to war.

• **On Many Fronts**—A checkup by the California Redwood Assn. reveals that the majestic trees are in service on many fronts, in a diversity of capacities from ammunition boxes to hangar roofs.

But the wartime drain on redwood supplies is not destroying the tourist attraction. Commercial lumber, to the extent of about 400,000,000 b. ft. a year, is taken from forests separate from those maintained as public parks. These commercial forests, it is estimated, have a stand of 34,000,000,000 b. ft., enough for 85 years at the present rate of withdrawal.

• **For Special Purposes**—The relatively high mechanical properties of redwood, combined with its medium weight, resistance to fire, low shrinkage, ease of working, and high resistance to decay, make it ideal for special purposes. It replaces scarce metals, can be used painted or unpainted without regard for weather, and can be obtained in sizes which in other woods would be unthinkable.

The roll call of wartime uses of redwood reads like a catalog of military procurement. It is used in structures and processing equipment in ship ways, supply dumps, aluminum plants, smokeless powder factories, and ordnance plants. In place of metal it is used in military highway bridges and camp water tanks.

• **Resistant to Chemicals**—Gasoline and synthetic rubber plants depend on redwood for tanks and cooling towers because it withstands destructive chemicals and wide variations in temperature. Army and Navy docks require roofs, floors, laminated decks, and underpinnings of redwood. Airplane runways use redwood in expansion joints.

In cold storage food plants, redwood is used in the framing and sheathing, and the processed bark of the big tree is used in the insulation. Sanitary facilities in military camps benefit by use of prefabricated redwood septic tanks.

In the four California counties where the redwoods grow, steps are being taken to perpetuate the supply by natural reforestation, by selective logging, and by control of fire and insects.



will be the keynote

WAR is wasteful, and victory is not won by counting the cost. With the coming of peace, however, emphasis must, and will, be placed on economy.

This call for economy will be answered by the thrifty performance of the new York Heat, which will soon

be available to you. In achieving the ultimate comfort of automatic oil-heating, your efficient new York Heating equipment will save you time, effort, and money.

Lighter post-war purses will welcome the thrifty efficiency of York Heat. Plan to have it in your home.

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Division of YORK-SHIPLEY, INC., YORK, PA.

MEMBER OIL HEAT INSTITUTE

WAR WORK that will lead to better peace-time packaging

When peace comes we will be better qualified than ever to meet new packaging needs.

We have been building machines right along to meet special war-time wrapping requirements. Equally important, many of the armament machines we build, particularly the Navy Gyro-Compasses, embody advanced mechanical principles applicable to packaging machinery. And all of the equipment has called for the highest type of designing skill and the finest precision workmanship.

Why not discuss your present and post-war packaging plans with us now? Write or phone our nearest office.



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Belle of the Beach ...in 1904

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General Engineered Shipping Containers are designed by experts. They're designed to fulfill a specific need. They're designed to save space, save material, save packing time, save dollars.

Often, General Engineers have suggested minor product changes that have resulted in a more efficient, more compact container. Results: reduced shipping space, less packing material, easier handling, increased production, substantially cut costs.

In many instances, your product and General Containers can come off your production line together. You'll want to know about General's "Part of the Product" plan.

Write General Engineers today.

Send for new booklet, which illustrates General Box Company's "Part of the Product" plan. Write today.

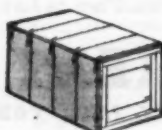


ENGINEERED SHIPPING CONTAINERS

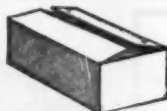
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General All-Bound Box

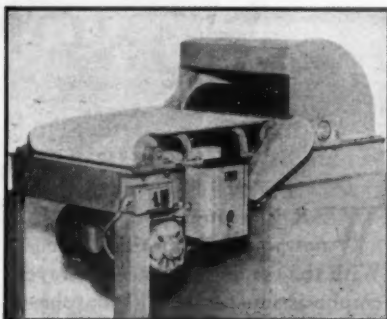


General Corrugated Box

NEW PRODUCTS

Disintegrator

Thousands of teeth on the outside of a revolving steel drum in the new Rawson Disintegrator promise to "disintegrate almost anything that a steel saw will cut, from hard metals to soft



food stuffs . . . from nickel and stainless steel to wood, rock wool, and chewing gum base." Its manufacturer, the Franklin McAllister Corp., 135 S. La Salle St., Chicago 3, is maintaining a laboratory for "making sample runs to see what industries the new product will service."

Toothed drums can be made in practically any size and assembled into almost any machine which might be dictated by a particular product requirement; as for example the small food-shredding unit illustrated above. It is equipped with a 20-in. drum and an automatic, variable speed feed of the belt conveyor type.

Fourteen units of an unrevealed design are already powdering magnesium successfully for military flares, incendiary bombs, and other pyrotechnics.

Vibration Dissipater

A new approach to the problem of handling mechanical shock and getting rid of vibrations (which may be said to consist of a series of shocks) lies behind the Chamberlain Molecular Vibration Absorber, manufactured by the Chamberlain Laboratories, 637 Ardson Rd., East Lansing, Mich. Instead of seeking to upset and calm down the vibration frequency rate of a given machine or mechanism by the use of resilient mountings or mechanical snubbers of one kind or another, the new unit is said to "dissipate" the energy of vibrations in the "form of radiant heat waves," in other words through the "conversion of that energy from kinetic form to that of thermodynamic form."

Each unit is a metallic pad about 4-in. thick, consisting of a welded cover

inclosing and hermetically sealing about 50 thin sheets of copper. Between the sheets are layers of air under such exceedingly high pressure that they are described as "hard as steel." Since the air layers are almost incredibly thin they are not resilient in the ordinary sense and do not react like the air in a pneumatic tire hitting a bump. Instead, the molecules of air may be said to transmute vibrations, transforming their

THINGS TO COME

Plant breeders are working on a hybrid of Burley and Turkish tobacco which may or may not render the cigarette industry independent of the "touch of Turkish" that must now be imported from the Near East. The new aromatic tobacco, which is still in the experimental stage, can be grown like Burley. It seems to contain the esters that give Turkish tobacco its characteristic aroma.

More power for the giant air transport of the future is forecast by the current construction of new production test cells capable of handling aircraft engines up to 4,000 hp.

Nitrocellulose plastic is based on highly flammable gun cotton, yet flame-resistant nitrocellulose compositions can be expected almost any time for use in lacquers, coated textiles, molded plastics, whatever. Yet to be determined in the laboratory is the optimum amount of magnesium ammonium phosphate to be added to cellulose nitrate as a combination filler and flame quencher.

The second Christmas after the war, if not the first, may be a peaceful one for father by reason of proposed new miniature incandescent lamps for series operation on the Christmas tree. As one burns out he will be able to spot it instantly because the rest of the string will continue to shine. Patented secret will be in the lamp's basing cement which will consist of a synthetic plastic mixed with just enough aluminum powder to short circuit harmlessly between the conductive shell and the central contact member when the filament fails.



"Hang the ticket . . . here's where I get off!"

It wasn't more than a whistle stop, way back in those days, and miles from his destination. But the old gentleman had just heard a fellow passenger's "hard luck" story that made him grab his hat and leave his ticket behind.

A rolling mill, according to the tale, had drilled for gas and struck rock salt instead. In this discarded substance he foresaw a whole new industry . . . for salt is a "must" in the production of many chemicals. Out of it, he began to build one of America's great arsenals of basic chemicals.

Remarkable? For a man of eighty, yes. But more remarkable than anything is the fact that in this land such an undertaking is *not* remarkable. Captain J. B. Ford, stepping off the train at Wyandotte, Michigan, to establish . . . on "hard luck," courage, and a hunch . . . the company that is now Wyandotte Chemicals Corporation, typified a spirit uniquely American.

It's a will to build. And as a nation, we have prospered by it. As a portent for the future, it holds rich promise. Promise in more livable cities, in more

pleasant homes and possessions . . . in the *jobs* that these will generate. Wyandotte, source of chemicals essential to the manufacture of countless products, will continue to contribute its best towards making that promise come true.



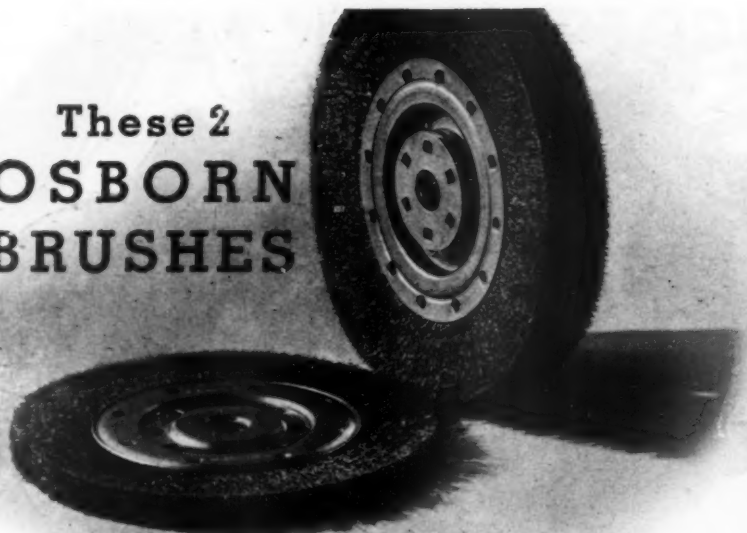
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More Economically

REEDS in the looms of cotton mills must be evenly enameled to prevent mangling of delicate fibres.

If new reeds were bought every time the hard baked enamel wears down, the cost of producing cloth would go up. Instead, the old enamel is removed and a new coat applied.

The fastest way to remove old enamel and rust from reeds consists simply in bringing the surfaces into contact with an Osborn Master Wheel, driven at the rate of 1800 r.p.m. Enamel, rust, burrs, all surface irregularities are swiftly removed.

Not only is this method faster than old hand methods, but it is more accurately controlled and hence does a more thorough job.

After the surfaces of the reed have been thoroughly cleaned, they are polished with a fine wire Osborn Monitor Section, also power driven.

Thus a regular maintenance job, vital to production, has been simplified and speeded up tremendously by the use of proper power brushing principles, as developed over the last 50 years by Osborn—the world's largest producer of brushes for industry.

YOU probably do not have reeds to recondition, but you probably DO have operations where brushing wheels, properly used, can help you reduce your cost, speed up production and improve your product. Write us and an Osborn engineer will be detailed to call on you.

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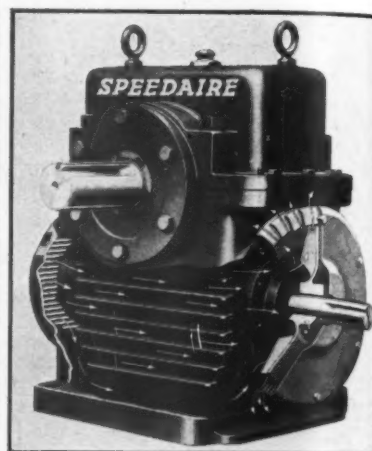
WORLD'S LARGEST MANUFACTURER OF BRUSHES FOR INDUSTRY

energy into heat which is dissipated through the copper sheets.

A steam hammer mounted on a set of such units becomes considerably more efficient, forging more deeply at each stroke because its rebound is considerably less. Various vibration problems having to do with precision machine tools, cold headers, air hammers, aviation engines, submarine motors, and other mechanisms are being solved. It is even said that a "carpenter's hammer equipped with a molecular vibration absorber the size of a 5¢ piece will drive nails without bending and with one-half the effort required by an ordinary hammer."

Air-Cooled Reducer

Double walls surrounding the oil bath of the new Speedaire Worm Gear Reduction Unit, developed by the



Cleveland Worm & Gear Co., 3250 E. 80th St., Cleveland 4, provide passage between them for cooling air sucked through by an exhaust fan mounted on the worm shaft. At usual motor speeds the air is said to lower the temperature of the oil, cooling the worm and gear and giving an "operating capacity equal to that of standard worm gear units having approximately double the housing dimensions."

"Mirac"

Twenty years of laboratory and field work underlie Mirac, new product of the Pemco Corp., Eastern and Pemco Aves., Baltimore, which is described as the "first commercially successful one coat white—one fired—direct to steel porcelain enamel." It is said to require "no special bond or pickling equipment. Nor does it need special handling. Mirac has excellent adherence and can be fired at 1,500F with the result, a brilliant highly opaque finish."



"MANAGEMENT ENGINEERING" HAS COME OF AGE

Management Engineering . . . as a result of notable service to Business and Industry has now come of age. During the period embracing World War I and World War II it has become a recognized and highly respected profession.

After all, the present span of the 20th century is a short time for any new profession to acquire for itself such unqualified acceptance from American Management.

And the road traveled over these years has not been an easy one. Blocked by wars, depressions and periods of inflation, it can be truthfully said that Management Engineering has played a notable part in promoting American enterprise and particularly in our history-making, war-production activities.

It is with pride that the Trundle Organization (one of 23 members of the Association of Consulting Management Engineers) celebrates its 25th anniversary in July, 1944.

25 years is a mature age when compared with the life span of Management Engineering.

Founded in 1919 with only three employees, The Trundle Engineering Company now has a staff of 150. Thousands of assignments for every phase of industry and business have been satisfactorily consummated during that time.

Today our organization is looking forward to still greater progress in developing and applying its service to the aid of management. There will be many new responsibilities to meet. As in the past, we will in the future, endeavor to assist American enterprise to maintain its world leadership.

Geo. T. Trundle Jr.
President

1919-1944

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LABOR

Pay Base Upset

NWLB ruling that merges war bonus with basic wages of seamen viewed as a precedent on labor's wartime premiums.

Up to July 15, an able-bodied seaman shipping from an Atlantic or Gulf coast port had a base pay of \$82.50 a month, plus \$17.50 in war bonus wages.

After July 15, the same seaman will draw \$100 in base pay but will get no war bonus.

● **A New Cost Factor**—It may seem the same to the National Maritime Union member when he rips open his pay envelope (\$100 before July 15; \$100 after July 15), but to the American Merchant Marine Institute, representing 23 major shipping companies, a new factor has appeared in postwar labor costs. And a wide section of industry lives in the shadow of a new precedent.

Behind what may seem a simple matter of bookkeeping industry sees a significant question: Will the government underwrite the postwar continuance of wartime concessions to labor which, when granted, were acknowledged to be temporary, wartime measures?

● **New Base Fixed**—NWLB's order which writes a new contract effective July 15 for the East and Gulf coast shipowners implies an affirmative answer.

With industry members dissenting, the board provided that present "temporary overtime rates" paid to seamen are to be incorporated in the basic wage and overtime structure. Even though the new contract will run only until Sept. 30, 1945, a new base pay has been established from which, no matter what the condition of the shipping industry then, postwar wage bargaining will begin.

● **Union Hails Victory**—That the postwar implications of the board's decision were not lost on the union was evident from the unrestrained comments by N.M.U. officials on their victory.

Calling the decision a "major contribution toward assuring maximum efficiency of the American merchant marine for the speedy winning of the war," union spokesmen stated that it "lays a cornerstone for unimpeded labor-management cooperation in the postwar period for the objective of full employment and uninterrupted operation."

● **In Different Category**—Employers have taken it for granted that organized

labor was prepared to fight to hold its wartime gains—meaning things like higher starting rates, union security, equal pay for women, etc.—but some of them look upon eight hours of overtime and war bonuses as matters in a different category.

Management has generally assumed that if unions fought for retention of such advantages, the government would at least be neutral.

● **May Ask Rehearing**—There is no indication that the American Merchant Marine Institute will reject NWLB's order, but it is likely that the shipowners will ask for a rehearing of the case so that the probable consequences of its policies can be pointed out to the board.

In addition to the radically revised base pay structure, operators object to other sections of NWLB's order. Particularly onerous to them is the provision for overtime premiums to begin after 5 p.m. and to continue until 8 a.m. while vessels are in port.

This grant was justified by NWLB as making Gulf and Atlantic coast conditions consistent with traditional West Coast practices, but operators point out that it is inconsistent with NWLB's own award for Great Lakes vessels which calls for overtime premiums only after eight hours of work in any one day or

for a period of more than 44 hours in any one week.

● **Some Work Hours Cut**—NWLB's decision also cuts down hours of work for certain employees on troop transports by providing that N.M.U. members in the stewards' department shall work only eight hours in a spread of twelve, instead of the present nine hours in a spread of 13.

The board denied the union's request for a check-off of dues on the ground that there was no precedent in the deep sea section of the industry. NWLB also cut from 15% to 10% the bonus paid on ships carrying explosives to make it uniform with that paid to the licensed personnel, but N.M.U. admits that the explosive bonus clause has been practically nonexistent since the outbreak of the war because ascertaining the exact nature of the cargo carried is impossible under "military security" regulations.

● **Seeds of Trouble**—Apart from the immediate and direct effects of NWLB's ruling and its interest as a precedent to other industries, unexpected results may flow from the board's policy of making East and West coast conditions "consistent." Instead of "stabilizing" the industry—NWLB's announced intent—some operators predict that it may do exactly the opposite.

Two bitterly rival unions represent East and West Coast sailors. Harry Lundberg, president of the Sailors Union of the Pacific (A.F.L.), and



VETERANS' TRAINING CAMP

Two young veterans are introduced to machine shop and foundry equipment which they'll learn to use at Henry Ford's new rehabilitation center for discharged service men. The

school set up by the auto magnate combines instruction in skilled trades with work in the healing atmosphere of adjoining farm lands. This layout occupies facilities of Camp Legion which was originally a vacation resort for the sons of World War veterans.



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CONTINENTAL CAN COMPANY

announces
a new laminated plastic —

MARCOLITE



For canoes?



For luggage?

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What would you say about a plastic that's lighter than aluminum but stronger than many metals? Shatterproof and resists abrasion like porcelain? And that's not all!

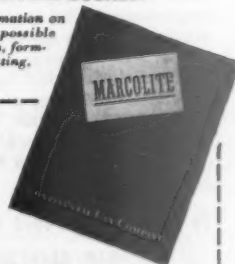
Marcolite can be formed into virtually any shape or size. It's highly resistant to acids, alkalis, hydrocarbons and other solvents.

Because it is a low-pressure laminate it can be custom-tailored to suit almost any specifications, without heavy equipment investment.

At present our production is solely for combat planes. But we're looking ahead to the peacetime uses of this revolutionary new material. Our free booklet will show manufacturers some of the many ways in which Marcolite may be adapted to suit your post-war needs.

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SPRINGS

Joseph Curran, president of the N.M.U. (C.I.O.), are perhaps the most dedicated personal enemies in the American labor movement. Curran calls Lundberg a "Trotskyite"; Lundberg calls Curran a "Stalinoid," and neither knows worse epithets. Their intense antagonism has been evident on picket lines, in print, and before Maritime Commission conferences in Washington. Both admit to a fervent ambition to destroy the other's organization.

• **Curran Benefits**—Curran's organizers have been much more active on the Pacific Coast trying to cut the ground out from under Lundberg than Lundberg has been on the Atlantic. The reason why Lundberg is apparently unbreakable is because his members have always had better conditions than Curran could get for his. It kept Lundberg too solid with the rank and file to be dislodged, a goal which to be achieved in any event will require a protracted scrap.

But with NWLB disposing of the old Lundberg claim that his union gets a better deal for its members than Curran can get for his, Curran has a better chance of moving in on the West Coast than he has ever had before. That he will proceed to do so is taken for granted in shipping circles—the only question is how soon.

Thus, ship operators believe one by-product of NWLB's action to stabilize the industry may be to bring on a violent, long-run jurisdictional war.

CURBS DRIVERS' REVOLT

The Navy injected itself forcibly last week into a labor dispute in the San Francisco Bay area when shore patrolmen removed bodily those Greyhound bus drivers who refused to haul standee passengers.

The drivers, responsible under Interstate Commerce Commission rules for the safety of passengers who cannot find seats, refused to pick up Navy personnel and shipyard workers when only standing room was available in the buses.

Armed patrolmen ejected the rebellious drivers—some of them women—and replaced them with uniformed sailors. By the end of the week, upwards of 100 of the 350 Navy-owned buses with which Greyhound transports workers to Vallejo, Mare Island, and other job spots were manned by sailors.

The standee question came up early in June during preliminary negotiations toward a new contract between Greyhound and the Amalgamated Assn. of Street, Electric Railway & Motor Coach Employees (A.F.L.). The National War Labor Board has agreed to resolve the dispute—but not until the Greyhound drivers restore the status quo by picking up standees.

G.M.'S NEW SOLOMON

Ralph T. Seward, 37-year-old impartial chairman of the milk industry in the metropolitan New York area, will become full-time impartial umpire between the General Motors Corp. and C.I.O.'s United Auto Workers effective Sept. 5.

Moving from one of the warmest to one of the hottest arbitration posts in American industry, Seward goes to Detroit with a one-year contract, succeeding G. Allan Dash, Jr., whose position in the auto industry became untenable because of labor pressure (BW-July 14, p. 108). Candidates for the position Seward leaves in the milk industry are being considered.

In addition to being qualified by his two-year experience in the chaotic New York milkshed, Seward brings to his new job the unusual connection of being an associate public member of the National War Labor Board. As arbitrator in the field, it is not impossible that he will be dealing with issues which he may have to rule on in his NWLB capacity.

Before functioning in the milk industry, Seward served as executive secretary of the old National Defense Mediation Board and as chairman of the Board of Immigration Appeals in the Dept. of Justice.

NLRB'S BIGGEST ELECTION

In a compromise proposal, the National Labor Relations Board last week recommended that 60,000 employees of the merged Western Union Telegraph Co. and Postal Telegraph Corp. vote in six geographic areas in an election to select collective bargaining representation.

Six A.F.L. unions representing Western Union employees requested system-wide balloting, and the company concurred. But C.I.O.'s American Communications Assn., which has a union shop contract covering former Postal workers, favored voting in 105 divisional units.

The election will be the largest and most complex NLRB ever held (BW-May 6, p. 107). In view of its importance, Samuel H. Jaffe, NLRB trial examiner, heard argument for 64 days before making the compromise recommendation. On July 25, the board will hold a public hearing on the proposal after which a final decision will be made and the election will then be scheduled.

Strategy Shifts

West Coast workers ask OPA to roll back lumber prices as campaign for higher wages seeks to frighten employers.

Beaten back three times in their drive for a pay increase (BW—Jun. 3 '44, p107), 100,000 restive lumber workers in the Pacific Northwest are currently making their fourth attempt to break through the National War Labor Board's wage ceiling.

Previously the lumber wage demands were rejected by NWLB's West Coast Lumber Commission; this time—with strategy patently designed to frighten the industry into asking for a compromise—the campaign will be carried on through the Dept. of Labor's Conciliation Service and the Office of Price Administration.

• **They Ask for More**—In a hearing at Portland, Ore., before a federal conciliator, representatives of 225 lumber firms in Oregon and Washington heard C.I.O.'s International Woodworkers of America not only raise their original wage demands but also urge OPA to roll back lumber prices.

The request for a price rollback came as no surprise because C.I.O. leaders announced the program shortly after their wage plea was rejected by NWLB in June. In a brief filed with the OPA the C.I.O. charged that the 1940 average realization price on lumber was \$20 per 1,000 b. ft., that the OPA ceiling raised it to \$31, but that adjustments and upgrading make the price nearly \$40.

• **Claims Rules Ignored**—Worth Lowery, international president of I.W.A., said that union members who grade lumber report that grading rules aren't being enforced.

The C.I.O., which had trailed the A.F.L. Northwestern Council of Lumber & Sawmill Workers' wage demands by 2¢ an hour, increased its original demand from a 90¢ minimum to \$1.15 instead of \$1.02½.

The A.F.L. stuck to its request for \$1.05 hourly but announced that it is preparing a study of working conditions in the industry and will seek new pay scales on a definite job basis.

• **Strike Warning**—Leaders of each labor organization, however, are cautioning their members against repetition of unauthorized strikes. In May 30,000 workers were idle for two weeks. Each group insists that increased pay is necessary to keep workers on the job.

On the other hand, lumber employers say that a pay increase would prove no



COLOR GOES TO WORK

Unwillingness to appear "arty," rather than skepticism, has been the underlying cause retarding the widespread use of color coordination in shops and offices (BW—Apr. 1 '44, 62). But with functional color running up good safety records, more and more old-line industries are succumbing. Latest to adopt color for its safety and psychological values is Henry Disston

& Sons, Philadelphia. In the hand-saw etching department, long walls have gray dado with white above, while one end wall is blue, the other yellow for a "change of pace" to relieve monotony and fatigue. The employees' sun room boasts color conditioning—three tones of blue to create a cool environment. Offices have been given treatments of blue and green tones, a functional mixture designed to relieve glare and eyestrain.

incentive to workers to stay on the job or return to the industry. They claim that the weighted general average in sawmills now is \$1.15 hourly and much higher in the logging camps.

YIELD ON HIRING ORDER

After holding out against a directive of the President's Fair Employment Practices Committee for six months (BW—Jan. 15 '44, p95), the Philadelphia Transportation Co. has yielded to a regulation of the War Manpower Commission and has agreed to hire Negroes as operators of streetcars and buses.

The traction company based its previous refusal to permit Negroes to hold higher-pay jobs, including operating, on a clause in its contract with the P.R.T. Employees Union, which forbade it. This contract died when the employees union lost a National Labor Relations Board directed election to the C.I.O. Transport Workers Union. A new contract, now being drawn, contains no such clause.

Since the WMC order on job referrals applies to men only, it was indicated that the traction company will restrict the hiring of women for operating positions to white women, of whom several hundred are now employed.

FEPC figures disclose that at present 2,718 Negroes are employed as transit

operators throughout the nation. There are 1,150 in Detroit (including 150 women); 130 in Chicago, where FEPC directed that they be hired; 937 in New York; and 104 in Cleveland.

In Winston-Salem, N. C., and Tulsa, Okla., entire bus routes are manned exclusively by Negroes.

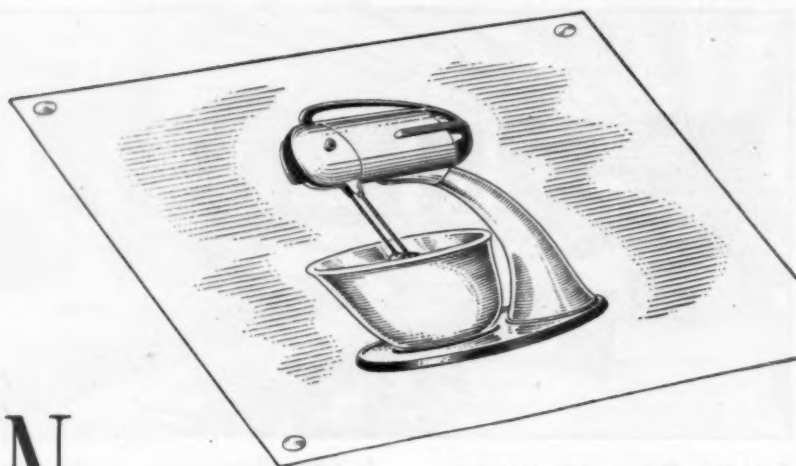
COURT REBUKES EMPLOYER

In the latest of a rash of court tests of an employer's right to speak his mind concerning employee organization (BW—Jul. 1 '44, p93), the Seventh Circuit Court of Appeals last week ruled that newspaper advertisements published by Reliance Mfg. Co. constituted interference with collective bargaining processes.

The advertisements, published on the eve of a National Labor Relations Board election in Reliance's Huntington (W. Va.) plants, urged employees to "Rely on Reliance."

The court held that while management "may have a right, under some circumstances, to express its opinion as to a union, or its preference between unions," such a right "certainly does not extend to a point where it becomes a participant in a contest to which it is not a party."

A.F.L.'s International Ladies Garment Workers was the union involved.



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One small thing making a big contribution to this product improvement and better performance is the Torrington Needle Bearing.

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Before putting your postwar products into work, consider the unique combination of advantages that led to widespread use of Needle Bearings in our wartime machinery and the equipment they produced for our fighting men. Here are a few of the principal features that will contribute to design improvements:

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|-----------------------|--------------------------|
| 1. Small size | 4. Efficient lubrication |
| 2. Light weight | 5. Ease of installation |
| 3. High load capacity | 6. Low cost |

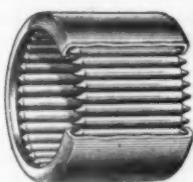
Information on types, sizes, and ratings, along with a list of typical Needle Bearing applications will be found in Catalog No. 30-A. Send for your copy today.

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TORRINGTON NEEDLE BEARINGS

Opposition Grows

Constitutional amendment
to outlaw union security faces
hostility of increasing numbers
of employers in California.

One-sided battle lines are being drawn in California over the proposed "Right of Employment" amendment to the state constitution upon which the electorate will vote on Nov. 7.

The tersely worded amendment in effect outlaws the closed shop, union shop, and maintenance of membership. It makes unlawful any arrangement where membership in a union is a condition of employment.

• **Shoup Stands Firm**—A growing list of business firms and employer councils is joining organized labor in its fight on the measure. So with the voting less than four months away, Paul Shoup, 70-year-old president of the vigorous antiunion Merchants & Manufacturers Assn., finds himself virtually alone in his advocacy of the amendment (BW—Apr. 29'44, p101).

C. J. Haggerty, state secretary of the California Federation of Labor (A.F.L.), describes the proposal as "the most vicious blow at organized labor ever attempted in California."

• **Bulk from L. A.**—The referendum made the ballot when 180,449 signatures were obtained, with only 178,764 needed to qualify legally. Haggerty asserted that of the total number of qualifying names, 160,000 came from Los Angeles County.

Even in Los Angeles, however, all is not well with Shoup's plan. Some employers have protested vigorously. The Church Federation of Los Angeles has turned thumbs down on the measure. The Chamber of Commerce of nearby San Bernardino, center of many unionized Santa Fe R.R. operations, rejected the proposal.

• **Powerful Opposition**—Most northern and central California groups consider the action ill-timed, pointing to the state's labor record since Pearl Harbor. Opposition includes the California Chamber of Commerce, San Francisco Chamber of Commerce, San Francisco Employers Council, California Farm Bureau Federation, state department of the Veterans of Foreign Wars, and Gov. Earl Warren.

UTAH WOMEN PREFER HOMES

Contrary to the announced expectation of the War Manpower Commission with respect to women remaining in industry (BW—Mar. 11'44, p46). Sal

Lake City industrialists, after a survey, say women workers are far more likely to turn up in their own kitchens after the war.

When the Remington Arms Co.'s ammunition plant closed in Salt Lake City last Jan. 1, approximately 7,000 of the 9,500 workers were Utah women. Industrialists thought their manpower problems would vanish.

But it was the womanpower that vanished. A spot survey indicated that most of them felt the war was over, especially since another Salt Lake City plant went from a three- to a one-shift basis.

Women had gone into war work, with patriotic motives, according to the survey; financial assistance to their household in most instances was a secondary factor.

Utah industrialists believe their experience will prove that postwar planners are worrying unnecessarily over the question of what to do with women workers.

Alabama Reneges

Court test threatened in conflict between state law and Regional War Labor Board's order involving m. of m.

The regional war labor board in Atlanta and the Alabama Dept. of Labor are entangled in a jurisdictional dispute of first-rank significance in each of the dozen or so states which have enacted or contemplate so-called "labor control" laws.

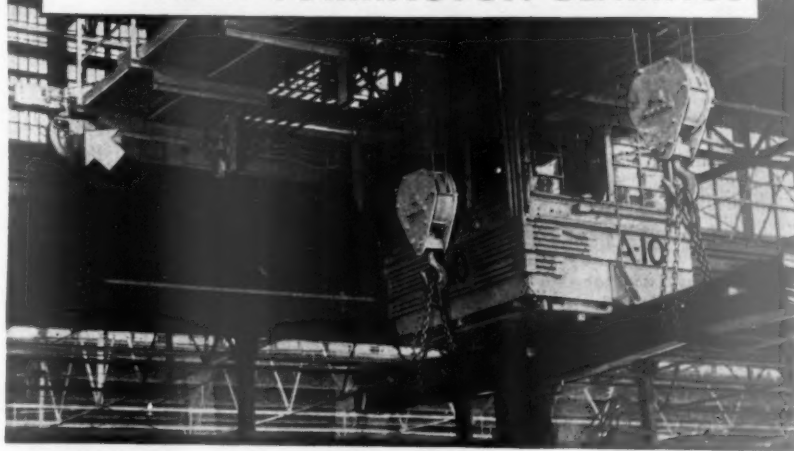
• **Enforcement Ordered**—The board ordered two affiliated Birmingham companies, Ingalls Iron Works Co. and Birmingham Tank Co., to enforce the maintenance-of-membership provision of their renewed contract with the A.F.L. International Assn. of Bridge, Structural & Ornamental Iron Workers. To do this the companies would have to suspend 20 employees, as demanded by the union, for failure to pay dues.

But the state has countered that obedience to the board's order would place the companies in violation of Alabama's Bradford labor control act (BW—Jun. 3 '44, p. 100), which guarantees to every worker the right to join or refrain from joining a union.

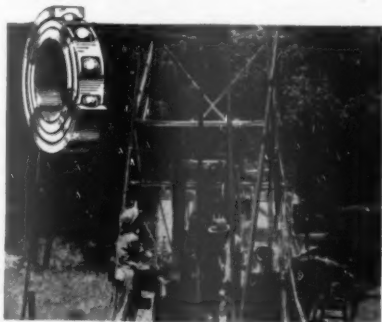
• **State Laws Superseded**—Ingalls had asked the labor board for instructions in the expressed fear of being held criminally responsible under the state law if it suspended the delinquent union members. The board replied, with industry members dissenting, that its orders supersede conflicting state laws because

IN THE NEWS

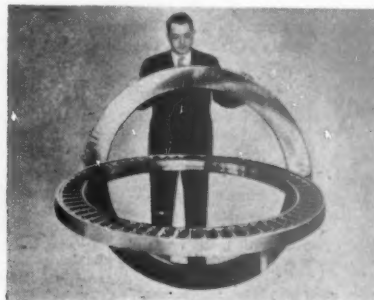
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PLOTTING THE UNDERGROUND topography to determine location of oil deposits prior to erection of well drilling machinery is the important operation performed by this complete portable drilling unit manufactured by the Sullivan Machinery Company. To withstand the shocks due to the sudden changes in resistance as the drill bores through successive strata of soil, sand, water and solid rock, Torrington Ball Radial Bearings were selected for use in the rotary table mechanism.



THIS HUGE ROLLER THRUST BEARING is an example of Torrington engineering and manufacturing facilities for producing large bearings to carry extremely heavy loads. Having an outside diameter of 53.125", with its assembly including 68 rollers 2" long and 1.5" in diameter; 68 rollers 1.375" long and 1.5" in diameter, it is employed in the revolving mechanism of a large charging crane which serves the plate mill pre-heating furnace in one of the nation's leading steel plants.

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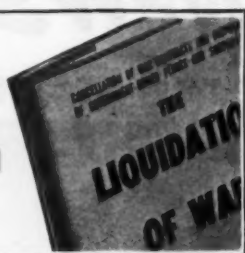
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By A. D. H. KAPLAN

Professor of Economics, University of Denver

133 pages, 5½ x 8½, \$1.50

How will our war production be liquidated? To aid businessmen in considering their own specific questions of conversion, this new study from the Committee for Economic Development surveys the problem and suggests definite policies and methods of solution.

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Is it realistic to treat transition to peace production as a back-to-normalcy movement?

What will be the areas of distress requiring help until a peacetime balance can be restored? What lessons do experiences following World War I teach?

What is the importance of timing of the reconversion program?

In many aspects such as these, the reconversion problem is examined in this book. The issues, the facts, the figures are extracted, placed in proper perspective, and simply stated for the busy business reader, and 41 concrete proposals are made for a program providing for a smooth transition to desirable postwar levels of production, employment, and wages.

JOHN M. HANCOCK, Office of War Mobilization, Washington, D. C., says, "I certainly feel that you have done a masterful job."

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they stem from presidential wartime powers.

The opinion brought immediate reaction from W. Emmett Brooks, director of the Alabama Dept. of Labor, who said his department will not accept the ruling, but will continue to insist that federal agencies respect Alabama law.

● **Broken Layoffs**—The majority order directed the company to adhere to the provisions of the contract, including the agreement to suspend union members who become delinquent in their dues. The order said that the union representatives invoked 30-day suspensions, but that they agreed with the company to five-day layoffs alternated with two-day reinstatements "to meet the practical objection that a layoff of this duration (30 days) would entitle the employee to release under War Manpower Commission regulations, and would deprive the company of a skilled worker."

Dissenting industry members criticized as "peonage" the policy of penalizing dues-delinquent workers by periodic layoffs which prevent them from obtaining discharge referrals to other jobs.

● **Repercussions in Florida**—More significant, however, was the state labor department's determined stand for states' rights in labor legislation. Director Brooks said that "this question (of In-galls suspensions) is one for the courts to determine."

Alabama's decision to fight for its control law is expected to have repercussions in Florida, whose Attorney General Tom Watson, opponent of unbridled unionism, is considering action to be taken against a National Labor Relations Board ruling (BW-Jul.1'44, p94) that an employer must bargain with a union despite a Florida law to the contrary.

● **Wisconsin Precedent**—The National War Labor Board has had one conflict with state laws. A year ago it got embroiled with Wisconsin's Employment Peace Board in the J. Breenbaum Tanning Co. case (BW-Sep.4'43,p100). The Greenbaum case involved precisely the same principle as that now in issue in Alabama, although the Wisconsin statute only partly resembles the Bradford Act.

The state-federal clash last year was not followed through. After a flurry of recrimination, Wisconsin stated, in effect, that it did not acknowledge NWLB's authority to countermand state laws but it would not contest board decisions. It is not expected that the Wisconsin conflict will be revived, hence Alabama's disposition to get a court ruling on the issue promises to bring the first judicial declaration on states' rights as they involve union-management legislation in wartime.

MARKETING

Grades—Again

Question of using A-B-C standards on canned goods comes to a boil as OPA seeks way around law's prohibition.

Canners thought that they had won a final victory in their two-year fight to keep OPA from using government A-B-C grades when Congress banned the use of OPA funds to pay the salary of any official who helps fix ceilings for processed fruits and vegetables in terms of grades and specifications not "in general use" (BW-Jul.1'44,p16).

● **Defining the Grades**—Last week, OPA apparently was ready to concede this victory and price the 1944 pack on the basis of commercial grades. As a first step, officials attempted to reduce commercial grades of canned peas to wit-



SQUARE MILK BOTTLES

By saving refrigerator space for housewives and processing space for the dairy, square milk bottles are proving popular all around at Cedar Rapids, Iowa. Developed by the Owens-Illinois Glass Co., Toledo, Ohio, Handi-Square containers are being used exclusively by the Iowa branch of Sanitary Farm Dairies. Experience shows the new bottles permit up to 50% more milk storage in homes, 45% more in the processor's cold rooms, and 33% more aboard delivery trucks—according to the glass company.

ing-by the simple expedient of knocking out those features of the Agricultural Marketing Administration's A-B-C terminology most objectionable to the industry and using what remained to describe the commercial grades of fancy, extra standard, and standard.

Called in for comment, pea canners offered no alternative. They simply repeated the industry's long-standing contention: that grades cannot be put on paper, largely because the important element of flavor does not lend itself to precise definition. Accusing OPA of trying to hasten an evolutionary process, the canners declared that any effort to define commercial grades would merely pervert them.

• **Shift to Warren?**—Convinced by this bout with the pea canners that commercial grades are unworkable, OPA may be expected to make a final effort to use AMA grades. Officials refuse to discuss the controversy, but observers outside the agency expect that OPA will seek to solve its problems by dumping them in the lap of Comptroller General Lindsay Warren.

Since Congress' prohibition on grades is tied to the use of OPA funds, the price agency could ask Warren for a "preaudit decision" on whether or not AMA grades are in general use as required by the law. OPA has the word of Paul Williams of AMA (now submerged in the War Food Administration's Office of Distribution) that sale of between 55% and 60% of the pack is tied to AMA standards.

Williams' estimate includes the Army's purchases, based on federal specifications which parallel AMA standards (the industry claims the parallel isn't close enough for OPA's purposes), the output of packers who use the Dept. of Agriculture's continuous-inspection service, and the A-B-C labeled brands of several large chains (BW—Nov. 30' 40, p27), notably the Great Atlantic & Pacific Tea Co., Kroger Grocery & Baking Co., Grand Union Tea Co., D. Pender Grocery Co., and wholesale cooperatives.

• **Move Was Anticipated**—To offset this argument, canners succeeded in getting their objections to AMA grades formally written into congressional testimony, leaving little doubt as to what Congress intended when it proscribed grades not in general use.

If the Comptroller General should decide that OPA can use the AMA grades, such a decision would merely provide a jumping-off point for further controversy. The canners' record of opposition to government grading antedates OPA by many years.

• **How They Graded**—Grading of canned goods had its origin in the need for proper labeling of something the

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GRAPHIC GIFT

The chart presented by New York's Mexican Consul General Ricardo G. Hill (left) to Daniel P. Wooley, regional OPA director, is symbolic of Mexico's economic ties with the U. S.

and its interest in American living costs. Putting finishing touches on this token of good-neighbor accord is Leon Helguera, Mexican artist. His handiwork shows considerable contrast between cost-of-living rises during the World War and this war.

buyer couldn't see. Cannery workers used their labeling techniques on the basis of a series of commercial grades (fancy, extrastandard, and standard for vegetables—fancy, choice, and standard for fruits). The grades, in turn, were based on a subjective and collective determination of quality. To his estimate of the elusive taste factor, the grader added his opinion of appearance, tenderness, and other qualities to arrive at a grade.

Commercial grades proved inadequate when the undercapitalized canners got into financial difficulties and had to turn to the banks. The banks demanded federal warehouse receipts, guaranteeing the quality of the canners' collateral. It was the demand for these receipts that started the Dept. of Agriculture working on government grades in 1926.

• **Quality by Points**—The canners criticize the government grades chiefly on the ground that the Dept. of Agriculture has attempted to write subjective determinations of quality into hard-and-fast standards, based on a system of point-scoring.

The canners might have had no quarrel with government grades if they had been confined to their original purpose of regulating dealings between trade buyers and sellers. But in the

early thirties the Agricultural Marketing Administration, under the active administration of Paul Williams, was soon advocating use of the A-B-C grades on can labels for the consumer to see.

• **Cause Embraced**—At the same time, various consumer organizations, including the American Home Economics Assn., the American Assn. of University Women, Consumers Research, and (later) Consumers Union, found in grade labeling a cause after their own heart.

These groups backed the fight for the original Tugwell food and drug bill, which would have required government grading of all canned goods, a provision deleted from the Copeland bill when finally enacted in 1938. In this was incorporated simply the old McNary-Mapes provision for a single minimum standard of quality below which substandard quality has to be declared but above which no grades need be stated.

• **Narrow Escape**—Canners had their narrowest escape when the NRA wrote government grade labeling into the industry's code (BW—Jan.26'35,p12). Only NRA's death at the hands of the Supreme Court saved the canners.

The grade labeling cause, which continued to be a hot issue throughout the thirties, received further impetus when two California canneries, N.

Schuckl & Co. and U. S. Products Co., voluntarily adopted the Dept. of Agriculture's new continuous inspection and grading service (BW—Jul.5'40,p44). Growth of the continuous inspection system has been halted only by the wartime shortage of trained graders (BW—May15'43,p94).

• **Promoting Their Own**—Throughout the controversy, the big canners have stuck by their contention that the subjective factors which go to determine the quality of canned goods cannot be strait-jacketed into A-B-C grades. In recent years, they have countered, principally through their trade association, the National Canners Assn., with active promotion of their own idea—descriptive labeling.

Advocates of grade labeling declare that the big canners' opposition to A-B-C labels stems from their fear of the effect of uniform government grading on the competitive advantage enjoyed by their own highly advertised brands.

• **Worst Possible Start**—OPA did not step into the grade labeling controversy until the end of 1942, when A. C. Hoffman, then food price chief, told a grocery manufacturers' conference that the 1943 pack of canned fruits and vegetables would be flat-priced by dollar and cents, that these prices would be tied to government grades, which would be required on labels (BW—Nov.28'42,p7).

By failing to give advance warning of its intentions and by making its announcement at a general food conference instead of to the canning trade alone, OPA succeeded in getting its campaign for mandatory grade labeling off to the worst possible start.

• **Obstacles Encountered**—OPA soon ran into difficulties in making good its intentions. Leon Henderson was forced out as price administrator. His successor, Prentiss Brown, rode the grade labeling seesaw for more than six months, while the controversy raged within and without OPA, with the 1943 pack still unpriced.

Canners took their troubles to Congress. Aided by hosiery manufacturers, who were also having grade labeling difficulties, they finally succeeded in getting the Taft amendment written into the Commodity Credit Corp. bill. This amendment knocked out grade labeling, and provided that OPA could establish prices based on specifications and standards only if (1) they were in general use, (2) they had been lawfully promulgated by another government agency, (3) there was no other practical method of price control.

Introduction of flat pricing (uniform dollar-and-cents prices), as distinguished from formula pricing (cost



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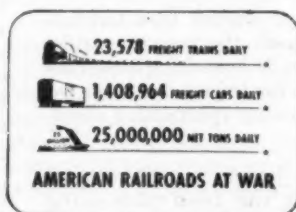


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plus traditional markup), served to complicate the grade labeling issue.

• **With AMA Grades**—OPA also announced that, because there were no clearly defined commercial grades, AMA grades would be used to determine the pricing range in which each canner's commercial grade fell.

Then OPA's Canners Advisory Committee presented Price Administrator Chester Bowles with a lengthy report which argued that AMA grades should not be used on the 1944 pack, for three principal reasons: (1) They are not a valid measure of quality. The canners advanced their time-honored arguments in support of this statement. (2) They are illegal under the Taft amendment. Canners have told OPA that, as a last resort, they are prepared to support this argument in court. (3) They are unenforceable.

• **Back to Congress**—When OPA stuck by its decision to use AMA grades, the canners took their troubles back to Congress, which wrote the Taber grading amendment into the OPA appropriations act.

In this maneuver, the price agency sees an attempt by the canners to cram legislation through by deliberately holding their fire until the last minute before the congressional recess. Canners claim that they were motivated only by the desire to give OPA as much rope as possible.

• **OPA Seduced?**—The issue is now emotionally charged on both sides. Canners declare that OPA has been seduced into going beyond its legal function of price control by the grading agitation of organized consumer groups. They particularly resent the influence on OPA of Donald Montgomery, consumers counsel for the United Auto Workers. This week more than twelve consumer groups exhorted Bowles to stick by AMA grades, or, failing that, to flat-price the 1944 pack on the basis of commercial grades, reduced to writing.

OPA maintains that the canners are resisting AMA grades because they provide the chief barrier to wholesale up-grading and price evasion.

• **Calpack Sued**—This accusation was sharply pointed up this week when OPA filed a triple damage suit for \$1,114,400 against California Packing Corp. Among the big canners, Calpack has been the bitterest opponent of A-B-C grade labeling.

The suit charges Calpack with (among other violations) widespread up-grading of canned fruits and vegetables, both those which were formula-priced on the basis of commercial grades in the 1941 and 1943 packs, and those which were flat-priced under AMA grades last year. OPA expects that the case will prove to be a decisive test of the enforceability



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Personnel record writing cut from 23 operations to 1.

Time for 7500 daily job tickets reduced from 48 hours to 7.

Errors and arguments eliminated from payroll writing, overhead cut, paper saved.

100 people saved for more essential war work, out of one department alone.

You, too, can save paper, money, and manpower in these and many other ways by Addressograph *simplified business methods*. They revolutionize office work by writing payrolls, personnel records, dividends, tax records, job tickets—by providing tool crib controls—by identifying parts and shipments—by doing a hundred jobs more quickly, accurately, economically.

Addressograph (and Multigraph, made by the same company) can eliminate errors, and save you time and money on 80% of all the paperwork of your business. You probably have the machines already. Let us show you how to get the most out of them. Write or call Addressograph-Multigraph Corporation—Cleveland 17, and all principal cities of the world.

Addressograph
TRADE-MARK REG. U.S. PAT. OFF.
SIMPLIFIED BUSINESS METHODS



Multigraph and Addressograph are Registered Trade Marks of Addressograph-Multigraph Corporation



Another Great Dam Benefits from FRICK Engineering and



Stretching across the North Fork of the White River, in Arkansas, Norfork Dam is 2624 ft. long and 220 ft. high—the fifth largest concrete structure of its kind in the U. S.

Frick Refrigeration played a triple rôle in hastening the building of this great Dam. To prevent dangerous heating as the concrete hardened, the water going into the mixers was chilled almost to the freezing point; in very hot weather, tons of crushed ice were also supplied; after being poured, the monolith was cooled for months by circulating chilled water through 900,000 ft. of pipe imbedded in the mass.

Frick Engineering and Frick Equipment served with distinction on this big project. Which leads us to repeat: "For the really important jobs, specify Frick Refrigeration."

FRICK CO., WAYNESBORO, PENNA.

Refrigeration

Consider the time-saving and labor-saving uses of

HEIN-WERNER HYDRAULIC JACKS



Industrial plants find many uses for Hein-Werner Hydraulic Jacks.

These super-powerful, easy-operating hydraulic jacks are great for lifting heavy loads . . . moving machinery . . . bending rods . . . pressing bushings . . . and many other operations.

For details on 30 ton capacity model (illustrated), as well as on 3, 5, 8, 12, 20 and 50 ton models, consult nearest industrial supply distributor, or write us.

HEIN-WERNER MOTOR PARTS CORP. . . Waukesha, Wis.

of AMA standards (although OPA has won other enforcement actions on the basis of government grades).

● **Enforceability Is Doubtful**—Canners maintain that the AMA grades are dubious enforceability. Government grades, the trade contends, are based on the judgment of inspectors who are subject to human frailties. The canners argue (and price officials tacitly admit) that A-B-C grades do not play an important part in OPA's pricing of the 1944 pack, and that OPA clings to them because of their supposed value as an enforcement device.

Advocates of government grades have a final word. They believe that even if the canners finally win the present controversy they will merely be postponing the inevitable day when popular demand with or without government sanctions, will force the industry to adopt A-B-C labels.

GARMENTS FROM BAGS

To help ease the shortage of cotton cloth, bag manufacturers and cotton growers have teamed up in an advertising campaign to encourage greater use by U. S. housewives of cloth from flour, feed, and other bags for garments and other home purposes.

A dozen years ago, poultry feed makers got the idea of printing bags with gingham patterns. These sacks are larger than a flour bag (at least 40 in. by 4 in.), and women in rural areas used them extensively.

The advertising campaign is concentrated in 2,800 small town newspapers supplemented by teachers' journals, and the Washington (D. C.) Post, for office effect. Prizes are offered for ingenious adaptation of bagging to garments and home uses. The largest present use is for kitchen towels, and empty bags are sold by many country stores for the purpose. It is estimated that 30,000,000 yd. of such material are used annually in the U. S.

Retailers are cooperating, even in cities, as a means of easing the shortage of cotton cloth, and do not fear postwar losses in sales, because they know that bagging has been used for such purposes for more than a generation without any great effect on the sale of pig goods.

Flour millers have not generally adopted the gingham-patterned bag, because the printing sacrifices brand identity. Feed manufacturers use paper bags on sacks to identify their brands, print the brands on the bags in inks that easily wash out.

The campaign is financed and managed by the Textile Bag Manufacturers Assn., and the National Cotton Council of Memphis.

Autos Await Gun

Activity of car builders readying sales organizations interpreted by dealers to mean that distribution is in sight.

Straws in the auto merchandising wind—builders preparing their sales offices and announcements of new dealer contracts—lead many car dealers to believe that the time when they can get back into the business of selling new passenger cars is in sight.

Signs of Action—While the presidents of auto companies conferred with WPB this week-end on plans for resuming civilian auto production (BW—Jul. 8 '44, p. 24), retail dealers were cheered by the revelation that during the past two or three months the auto builders have been quietly preparing their sales offices for what looks like a prelude to active operations.

Other signs included talk about maintenance of prewar dealer discounts and strengthening of field offices.

Dealers Protected—One limited volume producer is telling its distributors that no new dealers will be appointed for a year or more after passenger car production is resumed. Outlets which stayed in business during the war will be rewarded with a temporary monopoly on the company's retailing.

General Motors is moving in another way to hold its dealers despite any competitive onslaught. G.M. has just announced a new two-year franchise which will be given automatically to its dealers who maintained service facilities during the war. Cancellation without cause, a fairly standard provision in prewar auto retailing contracts, is eliminated. Unsatisfactory sales performance, however, will continue to be grounds for cancellation.

Field Men on Road—The bulwarking of its much-envied network of distributors and dealers was quite natural for General Motors to undertake in the light of potentially competitive moves.

Dealer advisory councils, a popular prewar means of liaison between auto factories and dealers, have been put in running order in recent months by two companies. Packard started one for the first time, and Chevrolet reestablished its group, which was the original effort of the kind in the industry.

Virtually all factories have put field men back onto the road, as much to visit prospective franchise holders as to call on existing dealers. The factories hope to plug blank spots which have developed during the war by withdrawal of agencies, and to strengthen weak



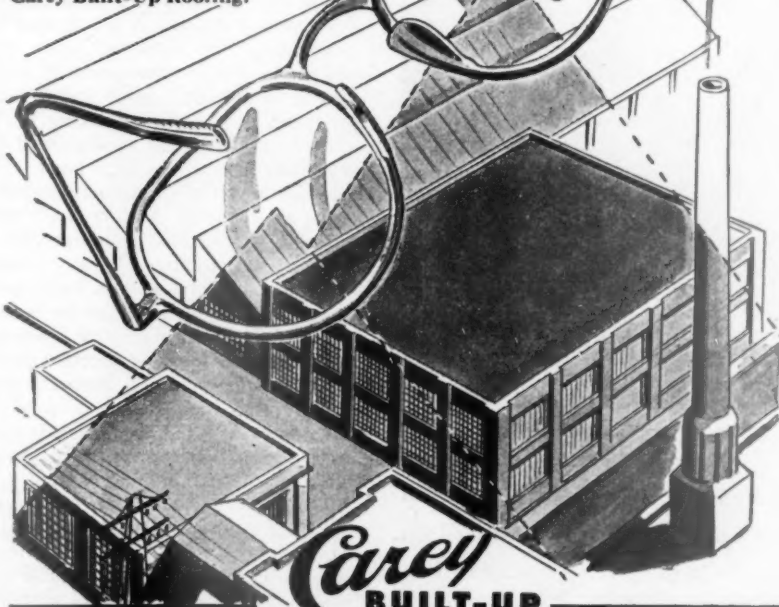
CAREY ROOF-INSPECTION SERVICE

Costs You Nothing . . . May Save You Much . . .

At Your Disposal Always!

Your plant roofs may be in good condition . . . or they may need a minimum of work that will prevent big, costly repair bills later. In any case, the safe thing is to have a CAREY APPROVED ROOFER or service representative make an inspection now and give you the facts—entirely without cost or obligation on your part.

If your roofs are in good shape, the inspector's report will inform you. If on the other hand, repairs or reroofing are necessary, have the work done with Carey Built-Up Roofing.



Carey BUILT-UP ROOFING

Long-lasting ruggedness and durability . . . correct elasticity to withstand temperature changes . . . finest weatherproofing protection . . . these are some of the qualities that have made Carey Built-Up Roofs a preferred choice for thousands of industrial structures the nation over.

For literature and name of the
CAREY APPROVED ROOFER
nearest you, write Dept. 29.

THE PHILIP CAREY MFG. COMPANY

Dependable Products Since 1873

LOCKLAND, CINCINNATI, OHIO

In Canada: The Philip Carey Co., Ltd. Office and Factory: Lennoxville, P. Q.

Thanks!



A mother writes, "During these war days I've been able to keep my daughter's interests focused on constructive outlets—thanks to Better Homes & Gardens. Its sensible, practical suggestions on child and parent guidance have helped us thru these critical times. In fact, your magazine is my personal ally in ALL home and family problems...whether they concern meal planning, family health, gardening, food canning and preserving, home management or child care and guidance!"

Better Homes & Gardens

America's Family Service Home Magazine

HEREDITH PUBLISHING COMPANY, DES MOINES 3, IOWA

spots by acquisition of new and stronger dealers.

● **Dealer Mortality**—There are plenty of dealer spots to be plugged. The latest authoritative estimate of dealerships is 33,000—this compares with 40,537 in early 1942, a wartime decline of 18.5%.

These reductions were fairly well scattered, with sectional weight heaviest in the West. Areas with a 25% dealer mortality include thinly populated states like Arizona, Montana, and New Mexico, but also include California, Iowa, Kansas, Minnesota, Ohio, Rhode Island, and Washington.

● **Emphasis on Quality**—But if passenger car output is held to around 2,000,000 units during the first year of resumed production, as is generally expected, there is little likelihood that today's total of 33,000 dealers will be quickly increased. Emphasis would be more on shifting dealerships to improve quality, than on enlarging the number of dealers.

The shifting of dealers probably will be speeded up when the new cars first come onto the road. A few dealers will undoubtedly be siphoned away from companies whose resumption of manufacture is delayed. Some independent producers have hopes of taking outlets away from the larger producers if the time element runs in their favor. This may account for strengthening moves such as General Motors has taken through its contract liberalization.

● **Dealer Financing**—Changes among the auto retailers are more likely to be caused by new money than by realignments. The auto plants have received many inquiries from prospective dealers who have accumulated business grubstakes during the war.

Universal C.I.T. Corp. is laying plans to finance worthy prospective dealers who do not have enough capital.

This financial help for new dealer establishments is not unprecedented in the automobile field. General Motors Acceptance Corp. did considerable of it during the thirties, but was curtailing its efforts in that direction a few years before this war began.

WAR BONDS FOR IDEAS

Seeking greater public interest in post-war products, the Adel Precision Products Corp. of Burbank, Calif., is offering five \$100 war bonds for the best letters setting forth pet peeves about household appliances or outlining suggested improvements.

Adel, which is conducting the contest in connection with a display of post-war products, plans new merchandise, such as a small but powerful electric mixer, a light aviation-type vacuum cleaner, a camera, and a complete line of stainless steel kitchen utensils.

PLEASE PASS THIS MAGAZINE
ALONG PROMPTLY—OTHERS
ARE WAITING FOR IT

DO NOT CLIP ADVERTISING OR EDITORIALS—IF YOU ARE SUFFICIENTLY
INTERESTED HAVE IT PHOTOSTATED

CIRCULATION STARTED

Cover of Year Month and Page Along To	Start	End

Chain Belt Adv. Page

Competitive Adv. Page

Editorial Publicity Page

Interesting Items Page

CHAIN BELT COMPANY

FRONT-PAGE INDEX

New gummed tags pasted on magazines for interoffice circulation kept employees of Milwaukee's Chain Belt Co. abreast of its advertising and that of competitors. Spaces for names and for page listings supplied by the promotion department make it easy to call attention to interesting items—both editorial and promotional.

SHOE REPAIR MEN GET BUSY

The shoe repair business took a precipitate nosedive after the World War and leaders in the industry are working on a conversion and promotion plan to prevent a repetition.

Shoe repair shops did a volume of \$243,000,000 in 1943 and may reach \$280,000,000 for 1944. But volume in 1917 was \$550,000,000, it shrank to \$125,000,000 by 1936, and it averaged only about \$140,000,000 before the war.

The industry hopes to avert a repetition of this slump, first by converting the shoe repair man into a retailer of polishes, laces, dyes, and other side lines as well as a rebuilder of worn shoes. Second, by good-humored but pointed advertising program designed to make America conscious of the unsightliness of rundown heels and broken soles.

The National Leather & Shoe Finishing Assn. through its board of directors and research committee, has approved a \$1,000,000 research and promotion program to head off the expected post-war slump by developing a better understanding of retail merchandising among the repair men.

Just in case you've eased up...
ON YOUR PAY ROLL PLAN



Official U. S. Coast Guard Photo: The elevator to a Coast Guard-operated transport hospital

Pause one brief moment. Compare your lot—and that of the men and women in your employ—with the lot of the infantrymen who meet the enemy face to face, who do the hardest fighting, who suffer the most casualties.

Let the full impact of war's unending grimness swiftly convert any tendency toward complacency into revitalized urgency. Remember—the war is not yet won.

As top management and labor, you've been entrusted with two major responsibilities—steadily maintained production, and steadily maintained War Bond Sales *through your Pay Roll Savings Plan.*

Decide *now* to revitalize your plant's Pay Roll Plan. Have your Bond Committee recheck all employee lists for percentages of participation and individual deductions. Have Team Captains personally contact each old and new employee. Raise all percentage figures wherever possible.

Don't underestimate the importance of this task. This marginal group represents a *potential sales increase of 25% to 30% on all Pay Roll Plans!*

Your success will be twofold: A new high in War Bond Sales; and a new high in production. Because a worker with a systematic savings plan has his mind on his work—not on post-war financial worries. He's taking care of the future now. His own. And his Country's future. *Help him! REVITALIZE YOUR WAR BOND PAY ROLL SAVINGS PLAN.*

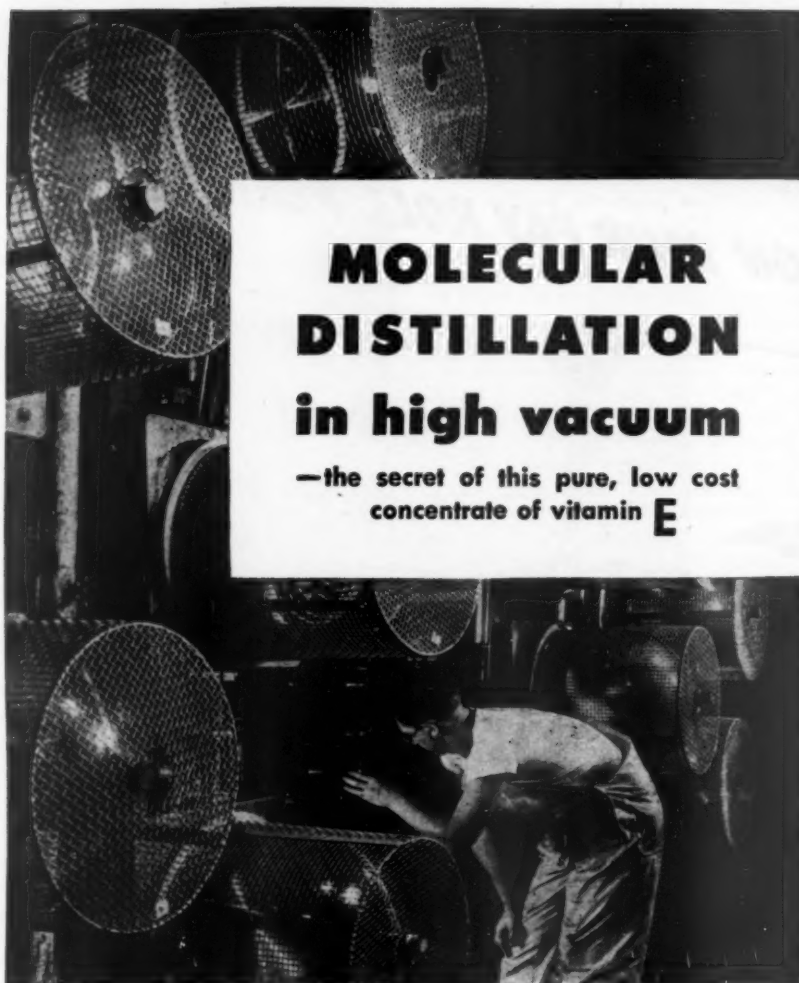


Back the Attack!
SELL MORE THAN BEFORE!

The Treasury Department acknowledges with appreciation the publication of this message by

BUSINESS WEEK

This is an official U. S. Treasury advertisement—prepared under the auspices of Treasury Department and War Advertising Council.



MOLECULAR DISTILLATION in high vacuum

—the secret of this pure, low cost
concentrate of vitamin E

*Some of the high-vacuum molecular stills which
produce Vegol. Torkel Korling photograph.*

VITAMIN E is acquiring stature. As new evidence appears, indicating this vitamin's true place in the picture, E is being incorporated in more and more multi-vitamin products.

We believe that our Vegol (concentrate of natural mixed tocopherols) is, by every comparison, the finest concentrate of vitamin E on the market. It is pure. It is bland. It

is stable. It is unusually low in cost.

The reason for this superiority is the method of production, DPI's unique molecular distillation, in high vacuum. This high-vacuum technique is also the secret of the leadership now enjoyed by DPI's concentrates of vitamin A.

When you begin to plan vitamin fortification for your products, you will find us ready and eager to serve.

Distillation Products, Inc.



Pioneering High-Vacuum Research
755 Ridge Road West, Rochester 13, New York
*"Headquarters for Oil-Soluble-Vitamins
and High Vacuum Equipment"*

Short-Wave Era

Wartime propaganda and news broadcasts boost radio's international service. Future as ad medium seems assured.

Before the war, the operation of less than a score of short-wave broadcasting stations in the United States provided little more than beginnings of an international radio service from this country.

After the war, thanks to the government-financed construction program, the nation can count 36 high-powered transmitters equipped to beam U. S. programs to nearly all parts of the globe. • **The Big Question**—The usefulness of such facilities is assured in a postwar world where international relations are all important. The big question for the radio industry is what short wave's commercial future will be.

The answer to this could be adequately written only if the patterns of postwar foreign trade were blueprinted. Will competition in world markets or cartelization of trade be the order of the day? What will be the spheres of influence for the British, the Soviets, the Dutch? Will China be an open market? Will tariff walls throttle reciprocal trade? On the answers to such questions hangs the commercial success of U. S. short-wave services.

• **Ads Are Assured**—Almost certainly, however, short-wave broadcasting will be important as an advertising medium for reaching the South American market. Before the war the National Broadcasting Co. sold time to U. S. advertisers on a Latin-American network which rebroadcast short-wave programs; this web now includes 120 stations.

The Columbia Broadcasting System has a group of 109 stations. The Crosley Corp. also had network operations under way in South America before the war. And Westinghouse is expected to enter the field of export advertising via short wave not only in Latin America but also in the Orient.

• **Facilities Leased**—The General Electric Co., Schenectady; World Wide Broadcasting Corp., Boston; and Associated Broadcasters, Inc., San Francisco are also short-wave licensees, whose facilities Uncle Sam leased for the duration along with all others in November 1942.

What kind of short-wave service these companies offer after the war will not be determined alone by prospects for the sale of advertising time.

• **Allocation Problems**—International short-wave agreements allocating channels among the various broadcasting na-

tions, will have to be made in a series of world conferences which will follow the peace. In Washington the Interdepartmental Radio Advisory Committee has already begun formulation of a policy to be presented at that time.

The industry expects that some hint of this policy will emerge soon when several hundred radio and communications experts are called to Washington to confer on the domestic reallocation of the entire spectrum. At this allocations conference short wave will have to fight it out with television, frequency modulation, and dozens of other point-to-point commercial communications for its place in the postwar spectrum.

• **Selling Point**—So far short wave's best argument for a preferred place rests on the argument that everything should be done to prevent another nation from running off with the short-wave field as Germany did in prewar days. The war was well along before Great Britain caught up with the job that Germany did in South America by short-wave propaganda. The British dominate now in foreign broadcasting, but the U. S. is considered third and gaining fast.

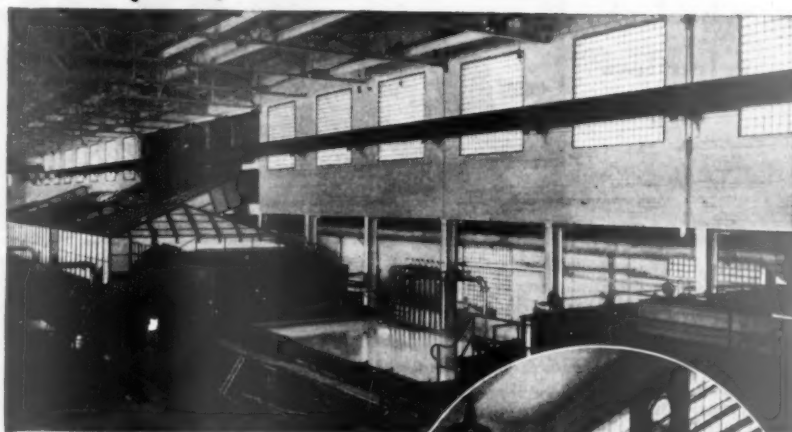
Another big imponderable in short wave's future is the extent of governmental control. At one extreme are certain factions in Washington that want to extend permanently the wartime pattern of operations—those who argue that the government should either operate the short-wave service or have absolute control of international broadcasts in the postwar period.

• **Postwar Subsidy?**—Diametrically opposed are those in industry—and in government—who want no government interference whatever. Somewhere between are those who see the government as the biggest purchaser of broadcast time from short-wave operators in the early postwar years. Hence, the successor to the Office of War Information would control policy to the extent that it handled programming for government time. Such federal purchases of time might be officially frowned upon as a subsidy and a means of keeping the industry under the government thumb, but nobody ever turned down a subsidy, no matter how repugnant the subsidy principle.

Short-wave transmitters in the U. S. are not subject to the 50,000-watt ceiling imposed on the power of standard broadcasting stations, and several of the international transmitters have 200,000 watts. Few have less than 50,000. Although some engineers argue that the point of diminishing returns is reached when power is increased much beyond 75,000 watts, others expect to capitalize on superpower after the war.

• **Beaming Is Important**—With certain exceptions, transmitters are located along the coasts. The West Coast sta-

PAPER MILLS FIND IT PAYS TO "Daylight with Insulux"

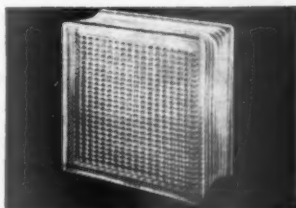


BRUNELANDER PAPER COMPANY, BRUNELANDER, WIS.

KEEP UPKEEP DOWN
BY INSTALLING
INSULUX
GLASS BLOCK

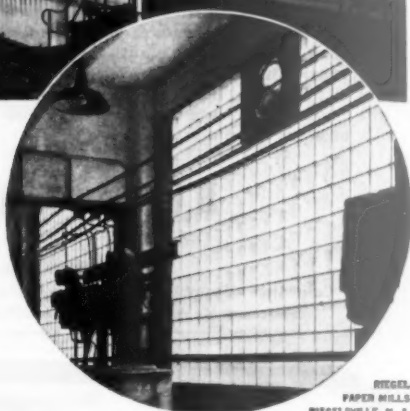
SAVE 5 WAYS

- 1 **SAVE FUEL**—Better insulation means less fuel loss.
- 2 **SAVE UPKEEP CHARGES**—Easy to clean—and to keep clean. No painting required.
- 3 **SAVE MAN HOURS**—Better light control ensures better working conditions.
- 4 **SAVE SPOILAGE LOSSES**—No infiltration of dust, dirt or moisture.
- 5 **SAVE REPLACEMENT COSTS**—Panels of Insulux do not rot, rust or corrode.



Insulux Glass Block is a functional building material—not merely a decoration. It is designed to do certain things that other building materials can not do. Investigate!

OWENS - ILLINOIS
INSULUX
GLASS BLOCK



INSULUX
PAPER MILLS
BRUNELANDER, WIS.

Insulux solves many problems for the paper manufacturer. Problems of light, temperature, humidity and dust control!

Panels of Insulux Glass Block transmit well-diffused daylight, deep into the interiors of work bays. There are less concentrations of light and deep shadows. All objectionable glare is eliminated.

Insulux panels, due to their high insulating value, help keep the plant warmer in winter and cooler in summer. And they prevent the infiltration of dirt, dust and moisture.

All of which means: an improvement in working conditions—a reduction in maintenance costs.

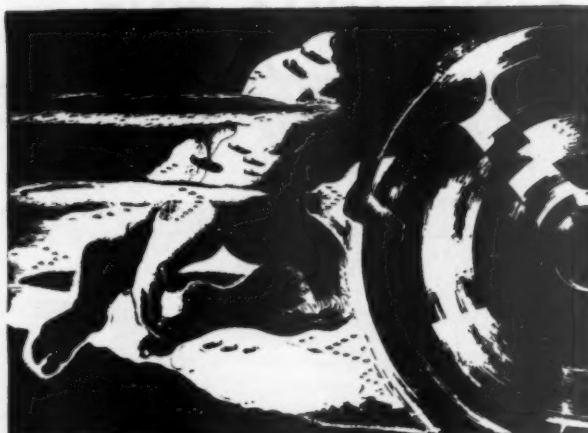
MAIL COUPON FOR FREE BOOKLET
OWENS-ILLINOIS GLASS COMPANY
Insulux Products Division, Dept. 25, Toledo, Ohio
Gentlemen: Please send, without obligation, your book entitled, "Methods of Replacing Worn-Out Windows with INSULUX Glass Block."

Name and Title _____
Firm Name _____
Address _____
City _____ State _____



THERE'S A PLACE IN EVERY BUILDING FOR INSULUX

★
the
wheel of
relentless
will
★



Powered by the will of a great nation and fueled with the dreadful anger of an aroused democracy, the wheel now grinds in furious haste to overwhelm the hordes of tyranny. It is the wheel of American industry, which hurls uncounted thousands of planes, tanks, ships and guns from war plants throughout our country. When it becomes once more the tool of peace, the R. C. Allen organization will again concentrate on making dependable business machines.



R.C. Allen Business Machines

ALLEN CALCULATORS, INCORPORATED
670 FRONT AVE. N. W., GRAND RAPIDS 4, MICH.

Makers of World Renowned Business Machines

10-Key Calculators • Portable and Standard Adding Machines • Bookkeeping Machines • Cash Registers
Statement Machines • All-Purpose Office Machines, Electric or Hand Operated



MARK TWAIN

— In every phase of life that word *Mark* has a definite significance. On the river steamers the man with the lead line measured the depth, called it to the pilot house. From that call one of America's greatest humorists derived his pen name — Mark Twain.

In modern industry the word "mark" has a greater significance. Through marking, modern production methods are guided and facilitated. In the field of marking, one name is outstanding —

MARKEM. Markem power-driven marking machines and marking compounds make durable marking practical on most materials and almost any shape or surface at production speeds.

Ask for Bulletin "Marking by Markem." Give details of your marking requirements and send samples of articles to be marked.

MARKING
(by MARKEM)
means more
than you think

IDENTIFIES, INFORMS,
INSTRUCTS,
GUIDES ASSEMBLY,
EXPEDITES MOVEMENT,
FACILITATES INVENTORY



tions have been built to serve the Asiatic theater, but engineers have found that South America can be served very well from any portion of the country; hence installations close to the coasts or borders are not essential technically.

Beaming (aiming transmission for particular areas to be covered) is the all important thing in short-wave broadcasting.

• **Frequent News Reports**—Wartime programming is in the hands of OWI and the Office of the Coordinator of Inter-American Affairs, with most of the programs originating in the New York studios of CBS and NBC. The staffs beam propaganda and news broadcasts ten hours a day to Europe for OWI; and eight hours a day to Latin America between them. The Army Special Services has charge of rebroadcasting domestic entertainment programs for military personnel overseas.

Between NBC and CBS, Latin America receives foreign language news broadcasts every half hour. But the preponderance of Good Neighbor programs falls into the music and variety program category. They are, in short, the type of program that American advertisers are most apt to use in promoting their postwar products in South America.

• **Programs Rebroadcast**—Typical of prewar commercial broadcasts through NBC were the Texas Co.'s (Texaco) sponsorship of the Metropolitan Opera broadcasts to South America; Camel's presentation of Xavier Cugat and his band; and the Esso news reporter.

Such programs, like wartime government-approved, noncommercial broadcasts, are picked up by South American stations and rebroadcast by long wave and in many cases by short wave.

BUTTER GRADING PROBED

Upgrading of butter as a means of evading price ceilings has reached such proportions that OPA is instituting a major enforcement campaign.

Butter is scored as 93 (top grade), 92, 90, 89, and cooking. OPA ceiling correspond. Roughly 10% of the butter produced in the U.S. scores out at 93, but OPA's spot checks indicate that more than 90% of the butter sold last year changed hands at the ceiling for 93 score.

Last month, OPA borrowed a group of trained butter graders from the War Food Administration and sent them into midwestern markets to check up on the grades of butter being readied for shipment.

There is evidence that the grading activity already is having a salutary effect. In the past fortnight, lower grades have been selling on the open market, and at the proper ceilings.

THE WAR AND BUSINESS ABROAD

BUSINESS WEEK

JULY 15, 1944



As you watch the war in Europe systematically building up to a smashing climax, keep these points in mind:

The advance in Normandy is slightly behind schedule, but during the delay operations of the **underground movements inside Nazi Europe have proved more effective than expected.**

Hitler's robot bombs are a serious nuisance but **they can't even alter the timetable of Nazi defeat.**

It is likely that **Soviet troops will reach Germany's 1938 borders at many points before Anglo-U. S. forces get to the Rhine.**

You should be prepared to see the Hitler government fall when this happens, and a new regime ask for peace.

German generals will be in charge then, and, in the opinion of British and U. S. intelligence headquarters, the generals won't fight when they see that it is hopeless.

So nobody will have to fight his way to Berlin.

Contrary to popular belief, important groups in Washington think the Germans may prefer to have the Russians come in first.

Despite loud cries for vengeance in the Soviet press, the Russians are not the authors of unconditional surrender and they have more than once hinted that they do not want German industry destroyed.

On the other hand, the Anglo-U. S. attitude toward Germany is stiffening.

If these partners have their way, the Reich will be administered for a long time by a strict United Nations military government.

This prospect is behind recent proposals that the U. S. adopt the Russian practice of "re-educating" Nazi prisoners—not simply for the experience which can be applied later in Germany, but also to reduce the menace of a Nazi underground.

De Gaulle's U. S. visit was a great success. As a result, you can expect:

(1) U. S. approval of de facto administration throughout France by de Gaulle's National Committee of Liberation representatives.

(2) Committee agreement to cease pressing for recognition as the official provisional government of France until enough of the country is liberated to permit an election. (The U. S. may later agree to acknowledge the Committee as the provisional government when one-third of the country is liberated or when Paris is reached.)

France's impounded gold reserves are not immediately involved.

Washington's hard-and-fast policy: Frozen funds are held in the name of the people of France and will not be released until a constitutionally legitimate government is established in France.

As usual, Washington's determination to be tough with Argentina (BW—Jul.8'44,p111) is tempered by the British who refuse to jeopardize future trade relations to that extent.

If the Treasury Dept. has its way, Secretary Hull will be forced to agree to the freezing of Argentine funds in the U. S.

Left alone, State would simply stop all purchases from Argentina of everything except meat, corn, and linseed—too mild a policy to get results.

Definitely in the cards is a strongly worded statement of this country's

THE WAR AND BUSINESS ABROAD (Continued)

BUSINESS WEEK
JULY 15, 1944

position, and the reduction of personnel in the Buenos Aires Embassy to a minimum.

There's no connection between this week's freak revolution in Colombia (or the recent revolutionary disturbances in Central America) and the situation in Argentina.

Instead of Nazi influences—as in Bolivia and Argentina—soaring living costs are behind most of the political crises north of the equator, and, because the situation is likely to get worse before it is better (page 32), more upsets are expected.

Don't overlook the possible long-range significance of the four-man mission of experienced foreign traders who will leave soon to survey U. S. trade opportunities in the Mediterranean area.

Sponsored by the Foreign Economic Administration, and with both State and Commerce Dept. backing, the Mediterranean mission is likely to be the first of several to study opportunities in liberated territories.

Ultimate objective, if this Mediterranean mission approves the plan, is to set up temporarily, in each newly liberated territory, centralized U. S. export headquarters through which individual American businesses would be represented until normal conditions are restored.

Not to be missed is the possibility that, in economically backward areas where trade volume, except in a few specialized lines, is normally small, the new setup for centralized foreign buying and selling may be permanent.

If you're seriously interested in this possibility, don't fail to familiarize yourself with the operating technique. It's been in use in the Middle East for three years (BW—Dec. 4'43, p47).

You shouldn't be surprised when Washington announces a bold plan for settling lend-lease accounts. It's in the making now, and when revealed will:

(1) Write off as a U. S. war expense nearly \$20,000,000,000 of food, munitions, and services supplied to allies.

(2) Offer to strike a bargain on \$5,000,000,000 of machinery and industrial supplies which have a carryover peacetime value.

The scheme will smooth the way for the monetary plan being drawn up at Bretton Woods (pages 15, 120) by writing war debts down to a minimum.

Watch Canada on Aug. 8. Two provinces—Alberta and Quebec—will go to the polls that day. Issue—following the Cooperative Commonwealth Federation sweep in Saskatchewan (BW—Jun. 24'44, p116)—is whether or not C.C.F. socialist policies (nationalization of banks and utilities) are to replace Canada's traditional capitalist system.

Basic English is entering the export market.

Hercules Powder Co. has just completed a pamphlet in "Basic" promoting an insecticide which will be sold abroad after the war.

Designed to be used in foreign markets where sales are too small to warrant the publication of a special local language promotion piece, the new pamphlet eliminates all abbreviations, specifies all measurements in the metric system, adheres strictly to the easy vocabulary of "Basic."

BUSINESS ABROAD

Cement Built Up

Joint commission's plan to expand industry in Mexico aimed at increasing output by 80% and erasing imports.

MEXICO, D. F.—The U. S.-Mexican Commission for Economic Cooperation has announced a complete nationwide development program for the cement industry, and revealed that execution of the plan has already begun.

This is only one facet of the U. S.-directed Mexican development program which blankets industry, finance, transportation, and agriculture.

• **Large Imports**—The commission, ever since its creation in May, 1943, has been studying the problem of Mexican cement production and supply. So far, production has always been far below needs, and important quantities had to be imported each year from the United States. In 1940, Mexico imported 46,000 bbl. (of 276 lb. each) of portland cement.

The commission's plan for cement production divides the country into five zones (map) each of which will in time produce its own needs and save transportation costs from distant producers. To reach this goal, existing factories will be enlarged and new ones built.

• **To Increase 80%**—According to plans, eventual production will pass 1,500 tons daily—about 80% above present total capacity. The new plants will employ 600 workers.

Because of its official status, the commission has obtained priorities on machinery needed to fulfill the plan, but the bottleneck remains to be widened. Existing cement factories are being kept less than capacity production due to failure of overburdened railroads to deliver raw materials and fuel in sufficient quantities. Final realization of the cement expansion scheme, therefore, rests upon recuperation of the railroads now being overhauled.

• **Lower Costs**—The construction and expansion of cement factories is expected to lower cement costs throughout the country. In 1939 the price of cement was about \$7.25 a ton; today the official ceiling price is 60 pesos (\$12), but builders are unable to obtain cement at this price and must turn to the black market where prices run between 150 and 200 pesos (\$30 to \$40) a ton.

The black market exists chiefly as a result of a law granting priority on

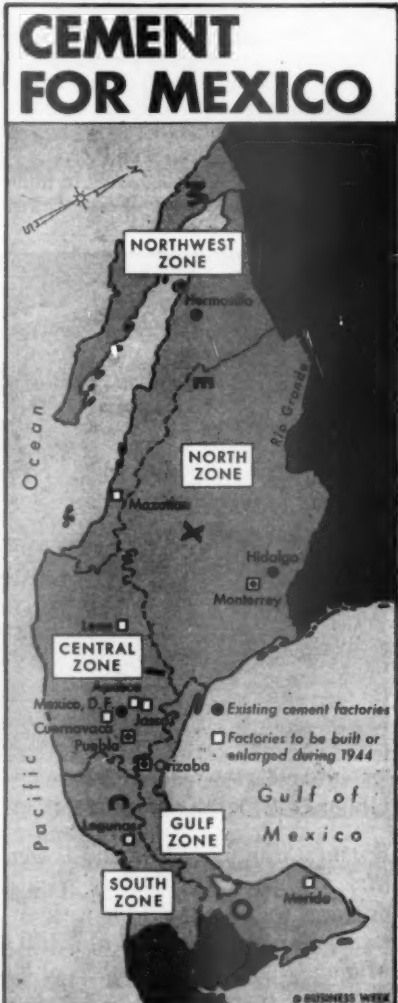
cement to public authorities. Influential politicians buy the cement, ostensibly for public construction projects, and resell it to civilian dealers through intermediaries. The building industry has requested abolition of the purchase privilege but has so far obtained no action.

• **Zones Described**—Completion of the new plants this year is expected to drive speculators and profiteers out of the business. The five-zone plan is described as follows by the commission:

(1) **Northwest Zone**—Only one factory, at Hermosillo, exists in this area. A new plant with capacity of 110 tons daily will be built at Mazatlan.

(2) **North Zone**—A plant at Monterrey (300-ton daily capacity) and another at Hidalgo (120-ton daily capacity) are unable to fill current needs. The Monterrey plant will be substantially enlarged.

(3) **Central Zone**—The output of a number of small cement plants in this zone is hopelessly inadequate to meet the needs of an area which embraces more than 40% of the country's population and an even greater percentage of its industry. A new factory of 450-ton daily capacity will be built at Leon.



and smaller ones will be built at Cuernavaca, Jasso, and Apasco. The Puebla plant will be enlarged.

(4) **Gulf Zone**—The Orizaba plant in this area is of insignificant proportions and will be enlarged to 200-ton daily capacity. Another in Merida, Yucatan, will be built to supply 100 to 150 tons daily.

(5) **South Zone**—No cement capacity exists in this area, and a small plant is to be built on the Inter-Ocean Railroad at Lagunas.

Fish for Chile

Serious effort to build fisheries industry is begun by Development Corp. with the aid of U. S. technical experts.

SANTIAGO—With the arrival of a five-man U. S. mission of technical experts on fishing and fisheries, it appears that serious efforts to rejuvenate Chile's fishing industry are under way.

• **Fleet Dwindles**—Chile's coastline is 3,000 miles long, bedecked with islands, and the waters which stretch along it from the tropics to the antarctic are teeming with fish of many kinds. Yet fishing in Chile has been more of a pastime than an industry.

Chile's prewar fishing fleet—and it has dwindled since 1939—consisted of 2,540 vessels, of which only 210 were motor driven. The rest were rowing or sailing ships.

• **Small Net Export**—Chile ranks first in per capita fish consumption in Latin America, but that amount is less than half the level in the United States or Britain.

Hake, swordfish, herring, and sardines account for about two-thirds of Chile's fish catch, which amounted to 42,260 tons in 1940 but fell to around 35,000 tons in 1942. Of this catch, only a small amount is exported. Imports have been about four times as great as exports, averaging around 500 tons a year. In 1942, for the first time, Chile had a net export of 75 tons.

• **Expansion Planned**—Now Chile's Development Corp., sponsor of the U. S. mission, hopes to encompass improvements in fishing techniques and equipment in the government's broad development program (BW—Jun. 24'44, p113).

The government has tried for several years to encourage fishing and fish consumption. A new fish refrigerating plant was opened last April in Santiago. A whaling station is under construction farther south. Bright, clean government-supported shops have been set up in the principal cities to sell fish almost at cost. An educational program is being

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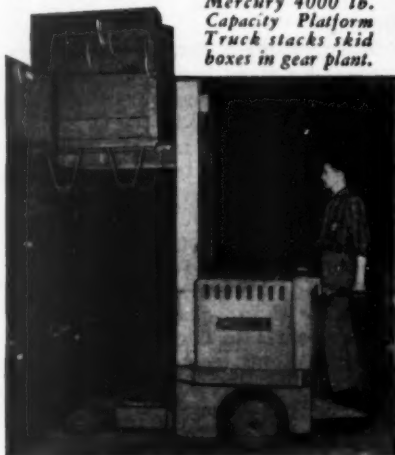
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conducted in schools, and in the press. Finally, a law was passed requiring all government institutions (hospitals, prisons, administration building cafeterias) to serve fish at least twice weekly.

• **Aims of Program**—Successful implementation of the fish mission's recommendations will boost Chilean exports and aid the nation's exchange position, advance efforts toward industrial diversification, create markets for refrigerating, processing, and canning equipment and materials, and for equipment to modernize the fishing fleet.

BRITISH COAL IN DOLDRUMS

Major Gwilym Lloyd George, British Minister of Fuel & Power, submitted a White Paper last week detailing the doldrums into which British coal mining has fallen since 1938:

(1) The net cost of coal has risen by nearly \$2.25 a ton.

(2) Production has dropped from 231,000,000 metric tons in 1938 to around 200,000,000 tons last year.

(3) The labor force in coal mining has fallen from 781,700 to 707,300.

(4) The average weekly cash earnings of miners has risen from \$11.15 to \$20.

The troublesome and costly strikes earlier this year (BW—Mar. 18'44, p113) lost more than 2,000,000 tons of coal during the first quarter alone.

As a result of strict economy in home and nonwar industry use of coal, British

consumption fell slightly during the past two years. Coal stocks, however, reflecting the sharper decline in production, dropped last year. After building up 500,000 tons in the first year 1941-42, and 4,700,000 in 1942-43, there was a drop of 1,300,000 tons in the 1943-44 period.

NEW ISLAND INDUSTRY

SAN JUAN, P. R.—The first sugar and rope factory to be established on this island—Puerto Rico Fiber Corp.—will begin operations at Mayaguez, September, employing 500 workers.

The factory will produce sacks of sugar and coffee, as well as rope, string and other products made from coconuts and other native fibers. The corporation has an invested capital of \$400,000 and machinery purchased with \$450,000 loaned by the Export-Import Bank of Washington.

The owners have asked the Public Service Commission to exempt the factory from taxes since it is a new industry. The annual payroll is estimated at \$250,000, and full capacity production at 3,200,000 sacks.

SEVEN FIRMS, ONE CATALOG

Seven Michigan companies, alert to the possibilities for industrial business in Latin America and South America after the war, have issued a general



UNDERGROUND MISSION

Britain's Minister of Fuel and Power, Maj. Gwilym Lloyd George (right), discusses wartime problems with Arthur S. Knoizen, director of WPB's Mining Division, and members of his American coal mission to London.

The committee of mine experts studying British methods in deep mining and strip operations, plus the economics of government control of the industry. Divided into three groups, the committee is touring coal fields of Scotland, South Wales, Lancashire, and the North Midlands.

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catalog of their products—machines, machine tools, and cutting tools—in Spanish and Portuguese editions.

The twelve-page catalogs carry descriptions and photographs of products, specifications, and other selling detail, in the style of similar presentations for the domestic markets.

The seven concerns which cooperated are Michigan Tool Co., Colonial Broach Co., Detroit Tap & Tool Co., Tungsten Carbide Tool Co., New Method Steel Stamps, Inc., and Colonial Bushings, Inc., of Detroit, and Genesee Tool Co., of Fenton, Mich.

These concerns operate joint sales offices throughout the U. S. outside Detroit. Their pooled catalog, therefore, was in line with their general merchandising policies.

Advertised products include gear cutting and gear lapping machines, high speed steel broaching machines, hydraulic presses, standard and special cutting tools, tapping machines and tap reconditioners, drill jig bushings, and inspectors' stamps.

CANADA

Big Lumber Deal

Canadian interests get \$140,000,000 British contract to be filled within two years after the defeat of Germany.

OTTAWA—With the erratic robot bomb chasing Englishmen from diggings they found after the blitz of 1940, Britain's postwar rehousing job is increasing in magnitude.

• **Two-Year Contract**—Chances are, following consummation of a deal last week, that the first new homes in Britain will contain Douglas fir from British Columbia, white pine and yellow birch from Ontario, Quebec, and the Maritime Provinces of Canada.

Ottawa has revealed that British government representatives have arranged with private Canadian interests for the purchase of 2,500,000,000 b. ft. of lumber to be delivered during the first two years after the defeat of Germany. Contracts will soon be signed in London.

• **Mutual Protection**—The deal has been simmering for months—delayed by discussion of guarantees to protect Britain against a fall in lumber prices, and Canada from the effects of an increase in production costs.

Reports now confirm that 60% of the \$140,000,000 contract will be placed

TREND OF BUSINESS CANADA AND U.S.A.

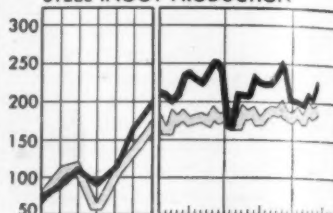
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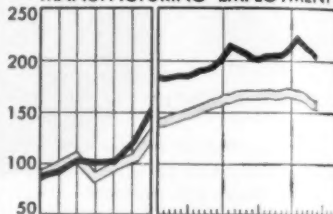
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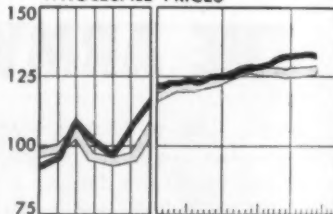
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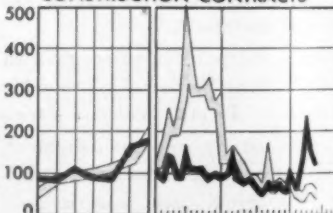
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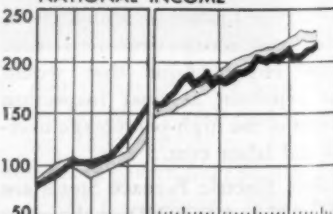
WHOLESALE PRICES



CONSTRUCTION CONTRACTS



NATIONAL INCOME



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with western Canadian companies and would constitute between 40% and 45% of western output. The remainder of the contract, for lumber from eastern Canada, would comprise nearly 50% of that area's normal output. Current prices have been made the basis of the sale.

As a result, Canadian timber interests are looking forward to a fairly lush period after the war. The big foreign order—only one of many expected—will sustain timber operations at a high level for some time when coupled with backed-up domestic demand.

• **May Get Tax Relief**—In addition, Ottawa has already promised that wartime excess profits taxes will be lifted as soon as the emergency ends.

There is also a chance that the industry's campaign against taxing methods on use of timber reserves will be successful. At present, the tax hits hard at the opening up of timber reserves.

• **Expansion Foreseen**—Finally, the industry is more than optimistic about the future because of the inevitable expansion in plywood, fiberboard, and plastics industries.

T.C.A. SCANS THE PACIFIC

OTTAWA—Clarence Decatur Howe, head of the Munitions & Supply Dept. and minister of air transport, surprised no one with his announcement last week that the government's Trans-Canada Airlines expects to establish air service between Canada, Australia, and New Zealand.

It had previously been announced that T.C.A. had drafted a Canada-West Indies-South American service. Although U.S. Vice-President Henry A. Wallace expressed the opinion last week in Seattle "that for 15 or 20 years after this war the air route to Asia via Fairbanks, Alaska, will not be a money-making one," Howe had long ago reserved for Canada exclusive rights to that airway to Asia.

Howe revealed last March that T.C.A. would be divorced from Canadian National Railways, and at the same time named that Canadian Pacific Railway (privately owned) would have to sever its connection with airlines within a year after the end of the war. C.P.R. owns and operates all but one or two air routes not controlled by T.C.A.

Attacks on the proposal to separate air and rail operations have faded in Parliament with Howe's recent modification of the ultimatum. As it stands now, a combination "in the public interest" is permissible, and Ottawa considers this a biller hooked on the air transport bill means of permitting government party members to support the bill without compromising their convictions.

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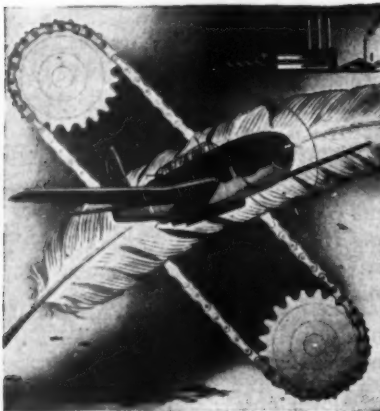
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THE MARKETS

(FINANCE SECTION—PAGE 63)

In the past week or so the stock market has been called upon to absorb an increasingly substantial amount of selling by traders who were anxious to cash in on the handsome profits they have had available for the taking as a result of purchases made mainly in the early days of the "invasion rally."

• **No Serious Pressure**—Thus far, however, the spurts of profit-taking have proved but short-lived, and productive of no serious selling pressure. Trading activity during such occasions has shown a tendency to drop off perceptibly and prices have given ground grudgingly.

As a result, such selling to date has served only to slow up the previous swift pace of the market's advance. By early this week Standard & Poor's industrial stock price index had climbed by easy stages to the highest point it has reached since November, 1938. The rail average also was able to record virtually a six-and-one-half-year peak.

• **Excesses Corrected**—Even bearishly inclined Wall Street market students, who had previously been betting otherwise, have been amazed at the extraordinary absorptive powers the market has been disclosing, despite the 15% advance scored by the industrial index and the 13% rise experienced by the rail average since mid-April.

Both the bull and bear factions on the Street are now agreed that the market's recent performances would seem to indicate that much of the original basic strength of the current rally still remains unexhausted, and that the sales for profit-taking purposes have already gone a long way toward correcting any possible specu-

lative excesses of the past four weeks.

• **How Much Longer?**—How far the current bull market can proceed before it runs into a substantial corrective movement is now the subject of considerable discussion in the financial district, but most brokerage circles apparently do look for higher prices during the coming weeks.

Even those operators who already are inclined to believe that many stocks are selling at high enough levels in view of the obvious uncertainties ahead, are wary about going too far out on the limb in their predictions as to when the saturation point of buying will be reached.

• **Rails Get Attention**—A number of chart readers go so far as to predict no serious halt in the present upswing before election day, and currently many are giving rail stocks particular attention.

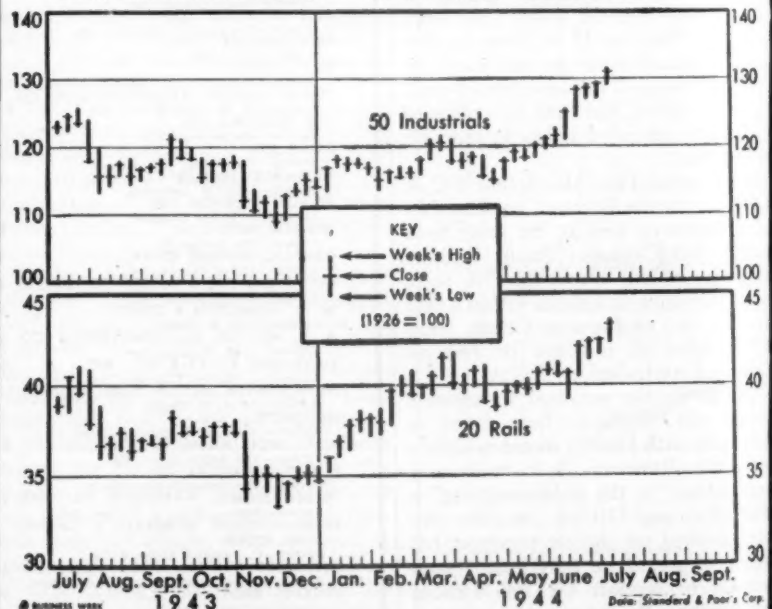
They say many recent purchases have been made by buyers as a hedge against postwar inflation and point to the fact that many gold stocks, for example, are now selling close to their highs of the year, although little gold is currently being mined.

Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
Stocks				
Industrial ...	131.0	129.5	125.1	124.8
Railroad	43.3	42.5	40.7	40.5
Utility	55.4	55.3	52.6	51.5
Bonds				
Industrial ...	121.0	121.0	121.5	116.6
Railroad	106.5	106.0	106.4	101.0
Utility	116.4	116.3	115.7	115.0

Data: Standard & Poor's Corp.

COMMON STOCKS—A WEEKLY RECORD



THE TRADING POST

How They're Thinking

More and more employers, either individually or through community or industry committees, are trying to keep in contact with their people who have gone to the armed services. Many of them are trying also to find out just what the servicemen have in mind concerning their return to civilian life after the war. Recently, H. D. Bennett, president of the Saco Scale Co., wrote to each of the company's 264 servicemen in substance as follows:

"I know you're busy now, but have you thought about your postwar job? Do you want your old job back, or some other job with us, or a job with any other company? Maybe you have had considerable technical training in the service and will be able to earn more. What do you want, your company wants to know you find it."

Replies began to come in promptly. From them it appears that 74% of the men would like to have their old jobs back. Some 16% want other jobs with the same company. About 3% are in doubt and want to stay there. And 1% want to get started in business for themselves. The other 6% are noncommittal. Many say they have learned new skills in the service and hope to win advancement rapidly when they return. To help these ambitious men, the company is setting up an internal educational course so that every returning veteran can get a full understanding of all the company's departments and affiliated activities.

Disqualification

A few weeks ago the United States Supreme Court by a 4-3 vote determined that insurance companies are engaged in interstate commerce and are accordingly subject to the Sherman Antitrust Act. This decision overrules precedents of 75 years standing and is so broad that it empowers Congress, if it wishes, to control and regulate the great insurance companies.

The Chief Justice, however, dissented. He said "the only practical effect of this decision now is to withdraw from the states, in large measure, the regulation of insurance and to confer it on the national government, which has enacted no legislative policy and evolved no scheme of regulation with respect to the business of insurance." As a result, far ahead many years during which great business and the regulatory agencies of every state must be harassed

by all the doubts and difficulties inseparable from a realignment of the distribution of power in our federal system."

Four justices of the court concurred to reach the decision; three, including the Chief Justice, dissented. Two justices took no part in the decision, deeming themselves disqualified. The court's decision was, therefore, determined by a minority of the full membership of nine justices.

The decision of so important a constitutional question by a minority of the Supreme Court fills the mere layman with wonder over the judicial process. His bewilderment may well be increased by the fact that the decision comes at a time when the country is engaged in a worldwide war.

For it appears that this minority decision was reached because two of the judges found it desirable to disqualify themselves on the ground of possible prejudice or conflicting interest, either present or past. If these judges had participated in the decision it would have reflected the opinion of a majority of the court. With that the country might well be satisfied, regardless of what the verdict might have been.

The so-called Insurance Company Case is not the only instance of this practice. There have been a succession of similar situations, such as the inability of the Supreme Court to pass on the constitutionality of the Public Utility Holding Company Act in the North American case, and a like situation arising in the Aluminum Co. antitrust litigation.

All of which leads the layman to wonder about the so-called disqualification of a judge in a lawsuit. May not this often rest upon a matter so trivial that if the litigants involved were consulted they would express their willingness to have the judge who considers himself disqualified sit nevertheless? Or is the matter necessarily so vital that judges should disqualify themselves on any ground however trivial, in order that the confidence of the country in our judicial process may not be brought into question, particularly in cases of constitutional import which affect not only the immediate litigants but also the entire political, economic, and social fabric?

In this connection it may be noted that the methods used and the grounds recognized for disqualification of judges are by no means uniform in the lower courts of this country. Whatever may be the final solution, full and frank discussion of the practice would seem to be appropriate. W.C.

ATABRINE



Photo courtesy Winthrop Chemical Co., Inc.

**Yellow Bullets
for the enemy
that stands on
its head**

**Pfaudler Glass-Lined Steel
Solves a Rush Production Problem**

For a time, after Japanese seizure of the world's largest quinine producing areas, our most dangerous battlefield enemy was the *Anopheles* mosquito, deadly carrier of malaria. There was a tremendous demand for atabrine, then the only known substitute for quinine. It was a rush job, calling for the best in mass production equipment and skills. Yet in a few months the potent yellow pills were being turned out by the millions . . . at one-fourteenth their previous cost.

**Pfaudler Production
Facilities Provide the Answer**

The manufacture of atabrine involved acid conditions. And, as in the manufacture of all pharmaceuticals, it was vital that the highest standards of purity be maintained. In addition there could be no hold-ups in the delivery of the equipment. Added together those things meant Pfaudler Glass-Lined Steel . . . Pfaudler for the engineering skill and for the production facilities of its two plants to meet the deadline . . . Glass-Lined Steel for maintaining laboratory standards of purity in a mass production process.

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ENGINEERS AND FABRICATORS OF
CORROSION RESISTANT PROCESS EQUIPMENT

THE TREND

BRETTON WOODS—ONLY THE BEGINNING

Two popular misconceptions about the Bretton Woods monetary conference need to be corrected if executives are to be able to evaluate the results properly when they are revealed next week.

In the first place, no vast abstruse program comprehensible only to technical experts is under consideration. Instead, there are only two main objectives, and these can be stated simply, along with a terse explanation of how they can be carried out.

After that, it should be made clear that the conference cannot be an end in itself. In spite of the long series of preliminary powwows which paved the way for the formal negotiations now under way in New Hampshire, no long-term world monetary program can be laid down in detail at a single meeting.

• **The Bretton Woods discussions** revolve around two proposals, one of which calls for an international fund of \$8,000,000,000 (to be increased to \$10,000,000,000 if Axis countries and neutrals ultimately participate) to be set up by the 44 United Nations and their associates.

Each participating nation would pay into the fund a "quota," which would be based on the relative importance of that nation in international trade and finance. A part of this quota would consist of gold, and the rest would be the currency of the individual country.

This country's quota, for example, is scheduled to be about \$2,750,000,000, of which \$600,000,000 would be in gold. Russia, originally slated for a quota of \$1,000,000,000, has protested that it will play just as important a trade role in the postwar world and therefore should be assigned no smaller quota than Britain, which had been listed at \$1,300,000,000 (page 15).

Each country's currency would be given a fixed value in terms of gold.

• **Once the fund is created** and approved by the participating governments, it would be used in this way:

Whenever a participating nation ran out of normal supplies of foreign exchange, it could go to the fund and buy foreign currency at the exchange rates publicly established by the international stabilization authorities.

Let's look at an example.

Britain, after the war, will use the dollars it secures from the sale of British goods in the United States to pay for big purchases of American rehabilitation supplies. But if British purchases of American goods at any time outruns the supply of available dollars, London can buy enough dollars from the stabilization fund to settle immediate bills in the United States. Then, Britain must slow down its buying of American goods until it has accumulated more dollars through sales of British goods to the United States.

Basic objective of the stabilization fund is thus to iron out temporary foreign exchange shortages without allowing the foreign exchange value of a currency to be undermined.

• **The second Bretton Woods proposal** is for a world bank for reconstruction and development to be established by international cooperation with a capital of \$10,000,000,000.

Objective would be to provide intermediate and long-term credits at reasonable rates for carrying out of approved projects, very much along lines now pursued by Washington's Export-Import Bank. The scheme is obviously devised particularly to help small or backward nations in their efforts to establish basic industries, carry out essential transportation or highway projects, or improve agriculture by developing irrigation or flood control projects, or by providing a minimum of modern equipment.

What needs to be understood by Congress (which must ultimately approve the plan) and business (which will have a special responsibility for making it work) is that Bretton Woods is but the first of a series of conferences which must take place if postwar economic collaboration is going to work.

• **Setting up an international stabilization fund** will not automatically stabilize world currencies. At best, the fund is intended only to create an atmosphere of mutual confidence, to provide a headquarters where international monetary problems can be impartially studied by experts from all countries, and to make supplies of foreign exchange readily available to tide over temporary emergencies.

Most bankers believe that no monetary plan can be soundly launched until schemes have been devised to keep world trade flowing in volume and held in comparative balance for each major country. To them, starting a monetary conference ahead of a world trade conference is like putting the cart before the horse.

And every fiscal expert in the country knows that a world monetary plan can succeed for long unless each participating member somehow manages to keep its domestic economy in order.

If world monetary stabilization is really going to be achieved, Bretton Woods must be viewed merely as a starting point toward the achievement of all these fundamental objectives.

This is the background against which next week's report on the results of the monetary conference should be interpreted.

The Editors of Business Week

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